```
410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13904, A
308, App
308, App
308, App
308, App
108, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64, Appl
23, Appl
23, Appl
4020, Ap
1150, App
21, Appl
414, Appl
87, Appl
101, App
87, Appl
101, Appl
1101, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24, Appl
14898, A
1, Appli
                                                                                                                                                          August 17, 2005, 22:08:26; Search time 243 Seconds (without alignments) 8073.645 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 36, App.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                1 ggaactaaaaaagaacttta.......ggggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4
Sequence 1
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2405568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued Patents NA:*

(cgn2_6/ptodata/1/ina/5A_COMB.seq:*
(cgn2_6/ptodata/1/ina/5B_COMB.seq:*
(cgn2_6/ptodata/1/ina/6A_COMB.seq:*
(cgn2_6/ptodata/1/ina/6B_COMB.seq:*
(cgn2_6/ptodata/1/ina/PcTUS_COMB.seq:*
(cgn2_6/ptodata/1/ina/PcTUS_COMB.seq:*
5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-461-912A-36
US-09-461-912A-24
US-09-513-99C-14898
US-10-000-489-1
US-09-399-913-64
US-09-399-913-64
US-09-350-614-64
US-09-313-294A-4020
US-09-385-982-150
US-09-385-982-150
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-1895
US-09-919-016-1995
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-019-183
US-09-919-016-2162
US-09-949-016-13904
US-09-949-016-13908
US-09-542-618A-308
US-09-542-618A-308
US-09-542-618A-308
US-09-642-18A-308
US-09-642-18A-308
US-09-642-18A-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1202784 seqs, 818138359 residues
GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                            nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    length: 0
length: 2000000000
                                                                                                                                                                                                                                                               US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                            1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                            OM nucleic
                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200221111111098765
```

			2;	09	590	120	180	240	300
		Ø	80						
888 , , , , , , , , , , , , , , , , , ,		st a t e	Gap	AATCAA	ZAT		CTGTGG 	CTGCTCATT	7 P
			2;	CAAA	-₹	GAT 	AGC HGC	5-E	ָלָא לַ כּאָד
sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sednence sed		9 8 9	6	TAC	TAC	ATT.	6-66 4-66 4-66	GCGAA	5 E
		dise	1 64	CAAACAA	2	AGAG HGAG	5 — 6 5 — 6 7 — 6	GGAGC	5 E
		i i	Length Indel	CA.	- 8	ATG.	CTA CTA	SAG 	ATAC
		^	ř, ře	ATG	ATG	8=8	CTCATGAAATCCTTCTATGGGGGAAG 		AAA.
81 81 4837 1 1 585 585 585		genes	4; -148 0	99-	-8 -8	15 T	ATC TC	ATC TTC	TAC
	တ	and sed d.		CAAG	- AA	5 -5 -5	6 — 6 - 8		TAC
9-370-838-2 9-854-133-2 9-854-133-2 9-468-945-3 9-298-942-3 9-298-942-3 9-298-945-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-948-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-946-1 8-468-948-1 8-468-948-1 8-468-948-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8-468-1 8	ENT	2A etection an y expressed 461,912A 13,008 sion 4.0	ore 601; DB ed. No. 2.9e Mismatches	ğ-	-ğ -ğ	0-0 0-0 0-0	5 <u>-5</u>	A P	TG T
68914444666676767666669696969696969696969696	ALIGNMENT	A tection expres 61,912A 3,008	No Sma	TGA	-1- -5-		73 13 13 13 13 13 13 13 13 13 13 13 13 13	GAC CAC	T. A.
	AL1	912A det. 111y - /113 ersi	Score Pred.	LTAT	-E	E E	SATC	11 T	, E
		09461912A ce A. for dete minially 6 US/09/461 JS 60/113, 18	O	TAT	TAT	ACT.			
		S/09 ence erce AB: TB: TB: US: US: US: US:	7 %	CTT	_£	t=t	131 131 131	GAC 	
00000000000000000000000000000000000000		ication US/09461912A is iton, Lawrence A. i.e., R. Tyler cki, John A. cki, John A. cki, John A. colon: differentially SCIOS.011A TION NUMBER: US/09/46 ATE: 1999-12-15 N NUMBER: US 60/113 E: 1998-12-18 N NUMBER: US 60/113 E: 1998-12-18 N NOMER: US 60/113 E: 1998-12-18 Sapiens sapiens	50. 99.	GAA	-8	STAT	FAAG	05 = 5 = 5	75 E
98		istion Ug in, Lawre R. Tyll R. Tyll in, John ii, John iii, Meth iii Meth ii	y rvat	AAA-	- & -	2-5 2-5 2-5	14 14 16 17		j
44444444444444444		SULT 1 -09-461-912A-36/C Sequence 36, Application US/09461912A BAPLICANT: Stanton, Lawrence A. APPLICANT: White, R. Tyler APPLICANT: Branton, Lawrence A. TITLE OF INVENTION: Methods for det TITLE OF INVENTION: Methods for det TITLE OF INVENTION: Methods for det CURRENT APPLICATION: Methods for det TITLE OF INVENTION: Methods for det CURRENT APPLICATION: Methods for det CURRENT APPLICATION NUMBER: US 60/113 PRIOR FILING DATE: 1999-12-15 PRIOR APPLICATION NUMBER: US 60/113 PRIOR FILING DATE: 1999-12-18 NUMBER OF SEO ID NOS: 48 SOFTWARE: FASTSEQ for Windows Versised ID NO 36 LIENGTH: 649 TYPE: DNA ORGANISM: HOMO SADIENS FEATURE: NAME/KEY: CDS LOCATION: (113)(405)	50.1%; ilarity 99.7%; Conservative	GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATG	GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA	aagcitaiciggiaittaactitictitcicigcitgicaaatgagagtiagatitiait 	TITACATITGCTAAGIGICCTGATCTGCTCATGAAAICCTTCTATGGGGGAAGCTGTGGG 	GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGACAACTCTTATCAGGGACAACTCTTATCAGGGACAACTCTTATCAGGGACAACTCTTATCAGGGACAACTCTTATCAGGGACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACTCAGAGGAACAACAACAACAACAACAACAACAACAACAACA	GCAGATICCTTAAGCGACCCTTT-GGACAACTCTTALCAGGGAGGAGCGAACTGCTCATT TCTGCCTACTTCTTTCCCTTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCA
च च च च च च च च च च च च च च च च च		SULT 1 -09-461-912A-36/C Sequence 36, Applic, Batent No. 6709855 GENERAL INFORMATION APPLICANT: Stanton APPLICANT: Milte, APPLICANT: Milte, APPLICANT: Milte, APPLICANT: Lewick. TITLE OF INVENTION ITLE OF INVENTION FILE REFERENCE: SOURREAT FILING DATE: NUMBER OF SEQ ID NO. 36 LENGTH: 649 TYPE: DNA CRGANIEM: HOMO SELENGE: DNA SOFTWARE: FASTESO ID NO. 36 LENGTH: 649 TYPE: DNA CRGANIEM: HOMO SELENGENCE INVENTION INVE	simila Simila 3; Cc	SAAC	3440	2 2 2 2 2 2 2 2 2 2 3	TA		3 7
0000000400000000000		ULT 1 09-461-912A-36/ equence 36, App atent No. 67098 atent No. 67098 APPLICANT: Sta APPLICANT: Sta APPLICANT: Dam APPLICANT:	h Տու 23;	ц-	4 0 —Ω	61 A			
		SULT 1 209-461-912A- Sequence 36, Serent NO. 6, SENERAL INFO, APPLICANT: APPLICANT: APPLICANT: TITLE OF INV FILE REFERENCE CURRENT FILIN PRIOR FILIN PRIOR FILIN PRIOR FILIN PRIOR FILIN PRIOR APPLIC CURRENT FILIN PRIOR APPLIC CURRENT FILIN PRIOR FILIN PRIOR FILIN PRIOR APPLIC PRIOR APPLIC FILIN PRIOR APPLIC FILIN FILI	uery Match est Local atches 62		64	58	121	181	241
8 9 0 1 1 2 8 4 5 9 7 8 9 0 1 1 2 8 4 5		ULT 1 09-461-9 equence atent No atent No APPLICAN APPLICA	ches						
00000000000000000000000000000000000000		RESULT Seque Seque Parter Parter APPI APPI APPI APPI APPI APPI APPI APP	Query Ma Best Loc Matches						
		USS		õ	g	රු පු	S 8	8 8	8 8

480 101 540

41

g ò 8 8

ò

ò 엄 ò 셤

```
RESULT 3
US-09-513-999C-14898/C
; Sequence 14898, Application US/09513999C
; Sequence 14898, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
; APPLICANT: Duclert, A.
; APPLICANT: Duclert, J.Y.
; APPLICANT: Glordano, J.Y.
; PATE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; PATE NO. 6783961
; FILE REFERENCE: 59. US2.REG
; CURRENT FILING DATE: 200-02-24
; PRIOR FILING DATE: 1999-02-26
; NUMBER OF SEQ ID NOS: 36681
; SOFTWARE: PATENT. PM
; SEQ ID NO 14898
; LENGTH: 582
                                  280 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 221
                                                                                                                                                   220 TCCAGGTCCTTCATTATTTTGTCCACAGACAGGTCTTTTTGATTTTTCCAAAAATCCA 161
                                                                                                                                                                                                                                                                          160 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTACCCA
                                                                                                                                                                                                                                                                                                                                                                  481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
   301 GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                          TCCAGGICCTTCATTATTTIGTCCACAGCCAGAGGGICTTTTIGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                           421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                        Length 582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43.6%; Score 523; DB 4; 1
97.9%; Pred. No. 9.6e-128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: r=a or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 97.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 2
OTHER INFORMATION: n=a, g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 114 TOTHER INFORMATION: y=c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: misc_feature
LOCATION: 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-513-999C-14898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 140
                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local
Matches E
                                               셤
                                                                                                                    ò
                                                                                                                                                                               g
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                       420
                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 579 GGAACTAAAAAAGAACTTTATTTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTIGIGAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                    TCCAGGTCCTTCATTTTTGTCCACAGGCCAGGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rrdererecerredadecrredadecerredadecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecendesecen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Stanton, Lawrence A. APPLICANT: Stanton, Lawrence A. APPLICANT: White, R. Tyler APPLICANT: White, R. Tyler APPLICANT: White, R. Tyler APPLICANT: Lewicki, John L. APPLICANT: Lewicki, John M. TITLE OF INVENTION: Methods for detection and use of TITLE OF INVENTION: Methods for detection and use of TITLE OF INVENTION: Methods for detection and use of TITLE REPERENCE: SCIOS.011A CURRENT APPLICATION NUMBER: US/09/461,912A CURRENT FILING DATE: 1999-12-15 PRIOR APPLICATION NUMBER: US 60/113,008 PRIOR APPLICATION NUMBER: US 60/113,008 PRIOR SEQ ID NOS: 48 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46.5%; Score 557; DB 4; Length 579;
99.7%; Pred. No. 1.1e-136;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                crecacececeaedadeceaec 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-461-912A-24/c

US-09-461-912A-24/c

; Sequence 24, Application US/09461912A

; Patent No. 6709851

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 579; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-461-912A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 24
LENGTH: 579
301
                                                        350
                                                                                                                    361
                                                                                                                                                                               290
                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                230
                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                    170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                         8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

ò

ò

ò g ò ઠે g

m

ö

1833

1893

192

1713

372

1653

492

```
1592 AATGTAAACATCGTGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGCTCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                     AGGCCCGATCTGCTCATGAATCCTTCTATGGGGGAAGCTGTGGGGCAGATCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGACCCTTTGGGACCACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1712 ATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL GATOR BELLY, MATIA
APPLICANT: Ling, Haai-Ping
APPLICANT: An, Wengian
TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
FILE REFERENCE: MNI-070CP2
CURRENT APPLICATION NUMBER: USO/09/399,913
CURRENT FILING DATE: 1999-09-21
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER APPLICATION NUMBER: USSN 60/110,033
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER APPLICATION NUMBER: USSN 09/298,731
EARLIER FILING DATE: 1999-11-20
EARLIER FILING DATE: 1999-04-23
EARLIER PILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: USSN 09/350,614
EARLIER PILING DATE: 1999-07-09
EARLIER PILING DATE: 1999-07-09

KARLIER PILING DATE: 1999-07-09

KARLIER PILING DATE: 1999-07-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                           193 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   drigaadccaccagaggcrcagrccgaggrcrcgcgcaggaaaaggr 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         553 GTTGAAGCCTTGGCCGAGGCGCGCGCGCGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                 ;
                                                                                                                                       Length 2016;
                                                                                                                                                                                 28; Indels
                                                                                                                                     DB 4;
                                                                                                                                  Score 485.2; DB 4,
Pred. No. 1.5e-117,
0; Mismatches 28,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 64, Application US/09399913
Patent No. 6361971
                                                                                                                                     40.5%;
                                                                                                                                                          Best Local Similarity 94.7
Matches 502; Conservative
; NAME/KEY: polyA_signal
; LOCATION: 1965..1970
; NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-10-000-489-1
                                                                                                                                                                                                                                                                                                                                                              1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                 389
                                                                                                                                                                                 269
                                                                                                                                                                                                                                                                          329
                                                                                                                                                                                                                                                                                                                  285
                                                                                                                                                                                                                                                                                                                                                                                          CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCACAGGC 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                         449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAGGGTC--TTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTAG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TICCATGCCGIGITCCATITGAGAIGCCATITIGGIGIGGCCGTIGAAGCCTIGGCCGA 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGA 47
                                                                                                                       CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTT--GACA
    TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                              TCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                           CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA
                                                                                                                                                                                                             404 ACTCTTATCAGGGAGGAGGGACTCATTTCTGCCCTACTTCTTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                        GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                  GTGTACTACAAATAGTCATTGCATGCAATGGTCAGGCCCGCCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                 CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BENJABLIN, SUEPINGARE
APPLICANT: TANAKA, HINCAKI
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: PCT/1801/01715
PRIOR APPLICATION NUMBER: PCT/1801/01715
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-07-03
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-15
PRIOR PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10000489
Patent No. 6794363
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCGCGCCGCACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gececededecrerecec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Benjanin, Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435..1836
NAME/KEY: 3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
US-10-000-489-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 2016
  90
                                                                                           150
                                                                                                                                     462
                                                                                                                                                                                 210
                                                                                                                                                                                                                                                                        270
                                                                                                                                                                                                                                                                                                                  344
                                                                                                                                                                                                                                                                                                                                                              330
                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                                                                                                                                                                                                                                                       390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                        à
                                                                                                                       a
                                                                                                                                                                   ò
                                                                                                                                                                                                                                                       ⋧
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
```

```
450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              228 CAGGICTITICAITAITITIGICACAGCCAGAGGGICCITITIGITITICAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67 ATCTGGTAT----TTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404 AGATTCCTCAGGTTGACCCCATGGGAGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288 GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCTGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7 AAAAAAGAACTITATITATIGAGGGCAAGGGGAIGCAAACAATACAAAAAICAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123 TACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243 TGCCTACTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stanton, Lawrence A.
APPLICANT: White, R. Tyler
APPLICANT: White, R. Tyler
APPLICANT: Damm, Deborah L.
APPLICANT: Lewicki, John A.
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: Methods for detection and use of
                                                                                                                                                                                                                                                                                                                                                                                                                                 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                            Query Match 27.5%; Score 329.8; DB 4; Best Local Similarity 77.8%; Pred. No. 7.3e-77; Matches 458; Conservative 0; Mismatches 107;
EARLIER FILING DATE: 1998-11-25
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER FILING DATE: 1998-11-20
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 64
LENGTH: 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 23, Application US/09461912A; Patent No. 6709855; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                      ) NAME/KEY: CDS
; LOCATION: (52)..(336)
US-09-350-614-64
                                                                                                                                                                                         TYPE: DNA ORGANISM: Rattus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 7
US-09-461-912A-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                   510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CICTGTCATTGGATTAACTTTTCTTTTCTCTGTGTGTTGTAGTTGGAGTTGGATTTTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IGCCIACTICTICCCTICTCCTICATGICTACTACAAAATAGICATIGCAIGCAAIGGI 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTGTCAAGTAGTTTTTTTCCCCTGC 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCCCCCCCCACTAGATAGAAAGCTCTGGAAGCCCCACTTTTCCATCTCGGCACTGGTC 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGTCTTTCATTATTTTGTCCACAGCCAGAGGGTCCTTTTGATTTTCCAAAAACCCCAGG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGGGTACCAGGGC---T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAGTIGGCCTACTICTICTICTICTICATGTACTACAAAATAGTCATIGCATGCAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       569 AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67 ATCTGGTAT----TTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Rhodes, Kenneth
APPLICANT: Betty, Maria
APPLICANT: Betty, Maria
APPLICANT: Ling, Hual-Ping
APPLICANT: An, Wenqian
TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
FILE REFERENCE: MNI-070CP
CURRENT APPLICATION NUMBER: US/09/350,614
CURRENT APPLICATION NUMBER: USSN 09/298,731
EARLIER APPLICATION NUMBER: USSN 60/110,277
FARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER PILING DATE: 1998-11-30
EARLIER APPLICATION NUMBER: USSN 60/110,033
                                                                                                                                                                                                                                                                                                                                                                                  7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAAGCTT
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                             24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAG 591
                                                                                                                                                                                                                                                                           Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAG-AATCTGTTGAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                             107; Indels
                                                                                                                                                                                                                                                                         Score 329.8; DB 3;
Pred. No. 7.3e-77;
0; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGICCIICAITAITIIGICCACAGCCAGAGGGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 64, Application US/09350614
Patent No. 6689581
                                                                                                                                                                                                                                                                         27.5%;
77.8%;
                                                                                                                                                                                                                                                                                                                             Conservative
     ď
  SOFTWARE: Patentin Ver.
SEQ ID NO 64
LENGTH: 600
                                                                                                                                       ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (52)..(336)
US-09-399-913-64
                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                           ORGANISM: Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-350-614-64/c
                                                                                                                                                                                                                                                                         Query Match
Best Local Simil
Matches 458; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168
                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     423
```

g ò g

g ò

g

\$ A à g ò g S 셤

े

a

ð g

ò

405

182

510 122 302

362

482

542

```
-09-385-982-150
                                                                                                                                                                                                                                                                                                                                   439
                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                     à
                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Ito, Laura Y.
APPLICANT: Ito, Laura Y.
APPLICANT: Ito, Laura Y.
TITLE CP. INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR FILE REPERENCE: PL-0017 US
CURRENT APPLICATION NUMBER: US/09/313,294A
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 7600
SOFTWARE: PERL PROGRAM
                                                                                                                                                                                                                                                                                                                   561 AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 502
                                                                                                                                                                                                                                                                                                 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                                                                                                                                                                                AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280 GAGCCCCGCCATAGTAGAAGTCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGTCCTTCATTATTTTGTCCACAGCGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483 GAATITICIGAAATGIAAACAICAIGGIITICCAIGGCGIGIICCAITIGAGAIGGCAITIT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                               396 AGATTCCTCAGTTGACCCCATGGAGGACGCATCAAGGTGTGGGTACCAGGC---T 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340 ccagirgecciacricircricircircraferaraciacaaaracricarrecarecarear 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                  7 AAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100 AAACCTGTGAAATGTAAAGCATCATGGTTTCCATGGCATGCCATGCCATTTGGGATGGCATTTT 41
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                 24;
                                                                                                                                                                    DB 4; Length 570;
                                                                                                                                                                 Score 328.4; DB 4; Length
Pred. No. 1.7e-76;
0; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGA 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40 GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCA 4
PRIOR APPLICATION NUMBER: US 60/113,008
PRIOR FILING DATE: 1998-12-18
NUMBER OF SEQ ID NOS: 48
SSOFWARE: FastSEQ for Windows Version 4.0
LENGTH: 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 4020, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
                                                                                                                                                               Query Match
Best Local Similarity 78.4%;
Matches 453; Conservative (
                                                                                                ; TYPE: DNA
; ORGANISM: Rattus rattus
US-09-461-912A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-313-294A-4020/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q ID NO 4020
LENGTH: 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                363 (
                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               423
                                                                                                                                                                                                                                                                                                                                                                                                                                  183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                 ò
```

TYPE: DNA ORGANISM: Zea mays

```
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380 TGTCCACAGCCAGAGGGTCTTTTTG-ATTTTCCAAAAATCCAGGGAACTCCTTTTCCATG 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217 TGTCCACAGCCAGAGGGTCCTTTTGAATTTTCCAAAAACCCAGGGAACTCCCTTTCCATG 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAA 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 AGCATCATGCTTTCCATGGCATGCTCCNATTTGGATGGCATTTTGAAGAATCTGTTGAA 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   157 AGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGCAACCTGTGAAATGTA 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 GCAANNAAAAAAAACTTTTTTTTTTTTGGGGNNNGGGGNTGCNANCNATNCAAAATCAA 64
                                                                                                                                                                                                                                                                                                                                                                                                            276 ATAGAAAGCTCTGGAAGCCCACTTT-CCATCTCGGCACTGGTCCAGGTCTTTCATTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGAAATGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Gaps
                                                                                                                                                                                                                                                                                              5,
                                                                                                                                                                                                                                       Length 276;
                                                                                                                                                                                                                                                                                                                                                     320 AAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 509;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFOCRMATION:

APPLICANT: ENDEGE, WILSON O., ET AL.

TITLE OF INVENTION: RODUCTS: II

FILE REFERENCE: CCDNA-260XX
CURRENT APPLICATION NUMBER: US/09/385,982
CURRENT APPLICATION NUMBER: US/09/385,982
CURRENT APPLICATION NUMBER: 09/328,111
EARLIER APPLICATION NUMBER: 09/328,111
SEALLIER PILING DATE: 1999-06-08
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1999-01-27
EARLIER FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 544
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                              Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6476212 700347548H1
NAME/KEY: unsure
                                                                                                                                                                                                                                 Query Match 13.7%; Score 164.8; DB 4; Best Local Similarity 79.9%; Pred. No. 1.4e-33; Matches 218; Conservative 0; Mismatches 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13.7%; Score 164.8; DB 3; 70.9%; Pred. No. 1.9e-33; iive 0; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              559 GCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Accircácicorgasicorgonales
                                                                                                                                                  or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 150, Application US/09385982 Patent No. 6262334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
LOCATION: (1)...(509)
COTHER INFORMATION: n = A,T,C or
US-09-385-982-150
                                                                                                                                         ; OTHER INFORMATION: a, t, c, g,
US-09-313-294A-4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 13.7
Best Local Similarity 70.9
Matches 195; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

ij

Gaps

6

Length 522;

432

543 219

g

õ g

g ò

ઠે

```
Sequence 5370, Application US/09949016

Sequence 5370, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

PILE REPERENCE: CL001307

CURRENT PILING DATE: 2000-04-14

PRIOR PPLICATION NUMBER: 60/241,755

PRIOR PLING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SEQ ID NOS: 207012

SEQ ID NO 5370

LENGTHRES PASESED FOR WINDOWS Version 4.0

SEQ ID NO 5370

LENGTHRES DATE: 2000-09-08

LENGTHRES DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            518 TTTCCTTTCTTCTATTGTTCTACAAGTAATCATTACAAGCAACTGTCAGAGCTGCC 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               458 ACCATGACCACGAATTCATTAAAATCCACTTGTTGTCCTTATTGGCATCCAGGTCCTGC 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398 ACTATCTTATCAACCAACTGGGTTTCCTTTTGGCACGAGGAATTCCGTGAGCTCTCGC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC------CCAGCG 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        338 TGCAGGAGCAGTTTCAGTTCCCCCTTGCTGAGCTTGAATCTCTTCCTTGCCTTGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484 AATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 6.3%; Score 75.2; DB 4; Length 592; Best Local Similarity 61.0%; Pred. No. 7.8e-10; Matches 122; Conservative 0; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                                                                              Query Match 7.2%; Score 85.8; DB 4; Length 5 Best Local Similarity 58.1%; Pred. No. 1.2e-12; Matches 175; Conservative 0; Mismatches 117; Indels
CURRENT APPLICATION NUMBER: US/09/774,528
CURRENT FILING DATE: 2001-01-30
NUMBER OF EEQ ID NOS: 441
SOFTWARE: pt_FL_genes Version 2.0
SEQ ID NO 414
LENGTH: 522
LENGTH: 522
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                         ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (223)..(522)
US-09-774-528-414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS-09-949-016-5370/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Human
US-09-949-016-5370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544 G 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           218 G 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: GILAD, Shlomit
APPLICANT: GILAD, Shlomit
APPLICANT: GIRAT.
APPLICANT: GIRAT.
APPLICANT: GIRAT.
APPLICANT: GROSMAN, Avital
TITLE OF INVENTION: METHOD FOR ENRICHMENT OF NATURAL ANTISENSE MESSENGER RNA
FILE REFERENCE: GILAD=2A
CURRENT APPLICATION NUMBER: US/09/680,420A
CURRENT FILING DATE: 2000-10-06
PRIOR PILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 28
SOFTWARE: Patentin version 3.1
SEQ ID NO 21
                                                                                                                                                        240
                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                          125 TTTANATTTGCTAANGGGCCNGANCNGCNNAAAAAANCCTTTTTNGGGGAANCTTNGGG 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAATCAA 98
                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 191;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAA 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
TITLE OF INVENTION: No. 6743619el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

8.4%; Score 101; DB 4; L
Best Local Similarity 100.0%; Pred. No. 7.4e-17;
Matches 101; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                        241 TCTGCCTACTTCCCTTCTGCTTCATGTAC 275
                                                                                                                                                                                                                                                                                                                244 TITIGCCCACTITITICCCTTTTGNITAANGGGGNC 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: PCR Amplified Human US-09-680-420A-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 414, Application US/09774528
Patent No. 6743619
PARERAL INFORMATION:
APPLICANT: Tang, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 21, Application US/09680420A; Patent No. 6528262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
Liu, Chenghua
Asundi, Vinod
Ren, Feiyan
Zhang, Jie
Zhao, Qing A.
Yang, Yonghong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-09-774-528-414/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-680-420A-21/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGIH: 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                  121
                                                                                                                                                     181
                                                                                                                                                                                                             185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
```

g

ò g ö

. 0

```
278 CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              289 CAAAGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAAGT 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           338 CCACTITGCCATCITACACAGGICCAGGICCTTCATTATTTTGTCCACAGGCT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTTCCACTCTGCAGGAAGCCTGGTAGCTCCTTCTCCATCAGCACCTTGAGCTCCCCT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccacciegecarciccarrescerceaegrecireaegaariraricaegearcerrer 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAAATAGTCAȚTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             703 caaagracrigigacacacacarcarcaccaccacaacacarcarcarcacraaacr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cririrccacriciscassasceresrascrecricerecareascaereres 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          643 ccaccigodearcrecarrosegrecearcricarocaarirarecaegearerer
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.9%; Score 71.2; DB 4; Length 860; llarity 61.2%; Pred, No. 1.1e-08; Conservative 0; Mismatches 73; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6673545 1422432CB1
                                                                                                                                                                                                                                                                                                                                 Score 71.2; DB 4;
Pred. No. 7.7e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 101, Application US/09919172; Sequence 101, Application US/09919172; Patent No. 667345; GENERAL INFORMATION: APPLICANT: Faris, Mary APPLICANT: Turner, Christopher M. TITLE OF INVENTION: PROSTATE CANCER MARKERS; FILE REFERENCE: PA-0036 US; CURRENT APPLICATION NUMBER: US/09/919,172; CURRENT FILING DATE: 2001-07-30; PRIOR APPLICATION NUMBER: 60/222,469; PRIOR FILING DATE: 2000-07-28; NUMBER OF SEQ ID NOS: 102.
                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: a, t, c, g, or other US-09-919-172-101
PRIOR APPLICATION NUMBER: 60/214,870 PRIOR FILING DATE: 2000-06-28 NUMBER OF SEQ ID NOS: 108 SOFFWARE: Patentin version 3.1 SEQ ID NO 87
                                                                                                                                                                                                                                                                                                                             Query Match 5.9%;
Best Local Similarity 61.2%;
Matches 115; Conservative
                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            458 TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109 TGGTCAGG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-919-172-101/c
                                                                                                                                                                                                                                                                 US-09-814-915A-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 101
LENGTH: 860
                                                                                                                                                                     LENGTH: 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 87, Application US/09814915A
Patent No. 6750015
GENERAL INPORMATION:
APPLICANT: Horwitz, Kathryn
APPLICANT: Richer, Jennifer
TITLE OF INVENTION: Thereto
TITLE OF INVENTION: Thereto
TITLE OF PREFERENCE: 2848-39
CURRENT APPLICATION NUMBER: US/09/814,915A
CURRENT FILING DATE: 2002-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4686, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF ILLING DATE: 2000-04-14

CURRENT FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/231,768

PRIOR APPLICATION NUMBER: 60/231,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SEQ ID NOS 4686SEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
382 AAGAAATTGTTACAGGCCACTGTGAGAGCAGCCACAAGCACCACATACTCCTGGAAGTCC 323
                                                                                                        TITIGATITICCAAAAATCCAGGGAACTCCTITITCCATGAGTACTCTCAGGTCCTCTT 459
                                                                                                                                                                                                                                     278 CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 289 CAAAGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAAGT 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           229 ccaccircacartecentes de la contra dela contra de la contra dela contra de la contra del contra de la contra de la contra del la contra de la contra del contra del la contra del la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crrrrrccacrcrecagaagccreeragcrccrrcrccarcagcaccrreaecrcccr 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCT 457
                                                                ACTITIGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             %; Score 71.2; DB 4; Length 434;
%; Pred. No. 7.7e-09;
0; Mismatches 73; Indels (
                                                                                                                                                                                                                                                                                                                          460 GITAAGIAGCCTTTAICCCC 479
                                                                                                                                                                                                                                                                                                                                                                                          202 crckgcrrcracrrcrcccc 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 5.9
Best Local Similarity 61.2
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            458 TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTCAGG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-949-016-4686/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
US-09-814-915A-87/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-949-016-4686
                                                                340
                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              398
                                                                                                                                                                                                                                                셤
                                                            ઠ
                                                                                                                         셤
                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

ö

```
146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           483 TCCATGACTTTGTCCACAACCTCCTGCTCTTGATTTCCTCTAAGAAATGGGAAAGCTCA 424
                                                                                                                                                                                                                                                                                                                                                                     338 CCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603 rirescrietrirerantereacrearerreadadeaderegeseseseses sada sada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        543 GCAACAAAGGCCATGAATTCCTGGAAGTCACATTCGCCGTCTCCCATCATTGTCCAGTGTT 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370 TICATIATITIGICCACAGGCCAGAGGGICITITIGATITICCAAAAAICCAGGGAACICC 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        310 GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                205 CCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        430 TTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423 iricírgaricaciccricacricogarircricaccircricricricric 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.4%; Score 65.2; DB 4; Length 1081; Best Local Similarity 55.2%; Pred. No. 4.5e-07; Matches 127; Conservative 0; Mismatches 103; Indels 0
                                                                                                                                                                                                                                                                Query Match 5.8%; Score 69; DB 4; Length 205; Best Local Similarity 88.2%; Pred. No. 2e-08; Matches 75; Conservative 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: LOTAING, Jeanne F.
APPLICANT: Lotaley, Debora W.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla W.
TITLE OF INVENTON: GENES EXPRESSED IN ALZHEIMER'S DISEASE FILE REFERENCE: PA-0024 US
CURRENT APPLICATION UNDEBR: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 119
LENGTH: 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
) OTHER INFORMATION: Incyte ID No. 6682888 021192.8
US-09-566-921-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  398 CTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               145 CTTTTTGACCACGCTATGCTCCAAG 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 19
18-09-919-039-183/c
; Sequence 183, Application US/09919039
; Patent No. 6727066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 119, Application US/09566921; Patent No. 6682888; GENERAL INFORMATION:
                                                                                                  u
                                                                                                                                                                                            OTHER INFORMATION: n=a, g, c or t
                                                                                                    or
                                                                                                    υ
                                                                                                    Ď
                      FEATURE:

MAME/KEY:

LOCATION: 53

OTHER INFORMATION: n=a, G
FEATURE:

NAME/KEY: misc_feature

LOCATION: 54
  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                     US-09-513-999C-14895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-566-921-119/c
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                  Sequence 466, Application US/09976594

Fatent No. 6673549

GENURAL INFORMATION:
GENURAL INFORMATION:
APPLICANT: Furness, Michael

APPLICANT: Furness, Michael

TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS

TITLE OF INVENTION NUMBER: US/09/976,594

CURRENT APPLICATION NUMBER: US/09/976,594

CURRENT APPLICATION NUMBER: 60/240,409

PRIOR FILING DATE: 2000-10-12

NUMBER OF SEQ ID NOS: 1143

SOFTWARE: PERL PROGRAM

SEQ ID NO 466

LENGTH: 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 14895/C

Sequence 14895/C

Sequence 14895, Application US/09513999C

Patent No. 6783961

APPLICANT: Duclert, A.

APPLICANT: Duclert, A.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

Patent No. 6783961

FILE REFERENCE: 59.US2.REG

CURRENT FILING DATE: 2000-02-24

PRIOR APPLICATION NUMBER: US 60/122,487

PRIOR APPLICATION NUMBER: US 60/122,487

PRIOR APPLICATION NUMBER: US 60/122,487

SOFTHARE: Patent.pm

SOFTHARE: Patent.pm

SEQ ID NO 14895

LENGTH: 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             278 CABABTAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTITITIGATITICCAAAAAICCAGGAACTCCTITITCCAIGAGIACTCTCAGGICCTCCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           703 caaagracirgragagagagagagagarragagagagagagagagaraagagaga 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTTCCACTCTGCAGGAAGCCTGGTAGCTCCTTCTCCATCAGCACCTTGAGCTCCCCT 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ccacciosocarciccarroscorcosocricorrosascarirrarccacoscarcerror
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 71.2; DB 4; Length 860;
Pred. No. 1.1e-08;
0; Mismatches 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6673549 1422432CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 205
COTHER INFORMATION: a, t, c, g, or other US-09-976-594-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 5.9%;
Best Local Similarity 61.2%;
Matches 115; Conservative (
458 TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                               523 TGGTCAGG 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTCAGG 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: unsure
                                                                                                                        RESULT 16
US-09-976-594-466/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     523
                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

ô

σ

```
TYPE: DNA
                                                                                                                                                    원
                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
APPLICANT: Kaser, Matthew R.
TITLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES FILE REFERENCE: PA-0035 US
CURRENT APPLICATION NUMBER: US/09/919,039
CURRENT APPLICATION NUMBER: 60/220,039
PRIOR PAPLICATION NUMBER: 60/222,113
PRIOR APPLICATION NUMBER: 60/222,113
PRIOR FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 401
SOFTWARE: PERL PROGram
SEQ ID NO 183
LENGTH: 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAACAAAGGCCATGAATTCCTGGAAGTCACATTGGCCGTCTCCATCATTGTCCAGTGTT 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250 TICTITCCCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCC 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557 ricecrecriririaarcreacrearerreaagaacregedagedagragraaceare 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    310 GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCC 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TICATIAITITGICCACAGCCAGAGGGICTITTTGATTTTCCAAAAATCCAGGGAACTCC 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rccargacririgiccacaaccrccrgcrcririgarriccrcraagaaargggaaagcrca 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1413, Application US/09513999C

Sequence 1413, Application US/09513999C

Sequence 1413, Application US/09513999C

Sequence 1413, Application

Sequence 1413, Application

APPLICANT: Duclart, A.

APPLICANT: Duclart, A.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

PAPPLICANT: Giordano, J.Y.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

PAPPLICANT: OF 8783961

PILE REFERENCE: 59.US2.REG

CURRENT APPLICATION NUMBER: US 60/122,487

PRIOR APPLICATION WNBER: US 60/122,487

PRIOR PILING DATE: 1999-02-26

NUMBER OF SEQ ID NOS: 36681

SOFTWARE: Patent.pm

SEQ ID NO 1413

LENGTH: 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTTGATGAGGTCCTTGAGTTCGGATTTCTTCAGCTTGTGCTTGTCTCC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                               5.3%; Score 63.6; DB 4; Length 962; 54.8%; Pred. No. 1.1e-06; Live 0; Mismatches 104; Indels
                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6727066 2706645CB1
US-09-919-039-183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:

NAME/KEY: UNSURE

LOCATION: 56

CTHER INFORMATION: Xaa=Lys or Asn
US-09-513-999C-1413
                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 54.8
Matches 126; Conservative
                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
LOCATION: 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 56..277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        430
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               377
                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

```
GENERAL INFORMATION:

APPLICAMT: VENTER, J. Craig et al.

APPLICAMT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CLOO1307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTMARE: FRESEEQ for Windows Version 4.0

LENGTH: 2592
                                                                                                              333 GAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAG 392
                                                                                                                                                 268 GAAGTCCACCTGGGCATCTCCATTGGCGTCCAGGCAAWTTATCCACGGCATC 209
                                                                                                                                                                                                                      393 AGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTC 452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597
                                                                                                                                                                                                                                                                              208 CTTGTCTTTTCCACTCTGCAGGAAGCCTGGTAGCTCCTTCTCCATCAGCACCTTGAGCTC 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  506 Arcradadederericecceaageccardecreadegecreececececedecededegee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            598 GAGCIGGACGCGGAGGCGGAGGCGCGGCGGCCTGTGCGCCTTTCCTTAGTACGTGC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             266 recercececerecreareresericececreecricecerececececaacecec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538 ATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         718 GCGCTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCGGACCCCGGGC
                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.5%; Score 54.4; DB 4; Length 2592;
Best Local Similarity 51.0%; Pred. No. 0.00047;
Matches 153; Conservative 0; Mismatches 146; Indels 1
Score 62.2; DB 4; Length 279; Pred. No. 1.5e-06; 1; Mismatches 44; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 22
US-09-949-016-13904/c
Sequence 13904, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-949-016-2162/c
; Sequence 2162, Application US/09949016
; Patent No. 6812339
5.2%;
illarity 66.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                     453 CTCCTTTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                            CCCCTTGGTCAGG 136
  Query Match
Best Local Similarity
Matches 88; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Human
US-09-949-016-2162
                                                                                                                                                                                                                                                                                                                                                                                         148
```

```
US-09-480-884A-308
                                                                                                                                                                                                                                                                                                                                                                                       478
                                                                                                  ò
                                                                                                                                                                     ò
                                                                                                                                                                                                      Вb
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                         QQ
                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
## APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL0.01.307;
CURRENT PELICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR PELING DATE: 2000-10-20

PRIOR PELING DATE: 2000-10-03

PRIOR PELING DATE: 2000-10-03

PRIOR PAPLICATION NUMBER: 60/231,498

PRIOR PELING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 13904

LENGTH: 43590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2506 ATGTAGAGGGTGTCGCCCGAGGCCATGGCTGAGGGCTCCGCCGCCACGGCCGCGGGGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2326 GGGCGGGGGGGGGGGGGGTTCCCGGCTCCTCGCTCGGTGGGCGCCCGGGCCCGGGC 2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 778 GCGC-GGCCCACGCCCTGCCCTCGCACCCGCCTCGCAGAGGCCTCGCCGCCCCC 836
                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGCTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCGGACCCCGGGC
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Kalos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Panger, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Grederson, Robert A.
APPLICANT: CANCERDIAN COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                  Query Match

4.5%; Score 54.4; DB 4; Length 43690;
Best Local Similarity 51.0%; Pred. No. 0.0018;
Matches 153; Conservative 0; Mismatches 146; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EQ ID NOS: 369
FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 210121.455C11
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
SOFTWARE: FASTSEQ for Windows Version 3.(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 308, Application US/09643597 ; Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
CORGANISM: Homo sapien
US-09-643-597-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                            ) ORGANISM: Human
US-09-949-016-13904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 23
US-09-643-597-308/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                           538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         718
                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352 AGTÍTTICATTITCITICCIGGGCTGCTTATCTGGGAAGCCTTCÁAAGAATTCGTTACACATC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           232 crgrccaagrrgcrcarcagcrrcrggaaagcagcrrcarcrcrrrrrccccaagaag 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  418 CCAGGGAACTCCTTTTCCATGAGTACTCTCCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 172 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             232 crericciascirecricarciaecrircregias de contrarcirer en 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      172 cresiscricios de contrador de la contrador de contrad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                               352 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        292 ATGGCGATGCAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112 cccrcrrrgccccaagracrrgrgaaggrgcacacccarccagggccrrccaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                      6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 54.2; DB 4; Length 421;
Pred. No. 0.00023;
      Length 421;
Score 54.2; DB 3; Length 4 Pred. No. 0.00023; 0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Hosken, Nancy A.
APPLICANT: Hosken, Nancy A.
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: LAND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C6
CURRENT APPLICATION NUMBER: US/09/480,884A
CURRENT FILING DATE: 2001-08-27
NUMBER OF SEC ID NOS: 330
SOFTWARE: FastSEQ for Windows Version 3.0
SSEQ ID NO 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-480-884A-308/c

Sequence 308, Application US/09480884A

; Patent No. 6482597

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52 GGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapien
```

```
US-09-630-940B-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172. CTGGGCAGCTCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTAGCTTGAACTTGTCA 113
478 -----CCAGCGAATTIGIGAAATGTAAACAICAIGGITTICCAIGGCGTGTICCAIT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       352 AGTITICATITICATICCIGGCIGCITATICIGGAAGCCITICAAAGAATICGITACACATC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            292 Aricició a recensidados de caración de contra c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       232 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                             112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCACAGGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCACAGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 54.2; DB 4; Length 421;
Pred. No. 0.00023;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Ralos, Michael D.
APPLICANT: Ralos, Michael D.
APPLICANT: Hosken, Chaitanya S.
APPLICANT: Hosken, Nancy A.
APPLICANT: Hosken, Nancy A.
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: MUMBER: US/09/542,615A
CURRENT FILING DATE: 2000-04-14
NUMBER OF SEQ ID NOS: 350
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                       US-09-542-615A-308/c
; Sequence 308, Application US/09542615A
; Patent No. 6518256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 308, Application US/09606421B Patent No. 6531315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Kalos, Michael D.
APPLICANT: Bangur, Chattanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Fanger, Gary R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 159; Conservative
                                                                                                                                                           529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529 TGAGATGGCAT 539
                                                                                                                                                                                                                                    52 GGGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 26
US-09-606-421B-308/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-542-615A-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local 3
ઠે
                                                                 g
                                                                                                                                                           ઠ
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Оp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
```

```
352 AGTITICATITICITICCIGGGCIGCITATCIGGAAGCCITICAAAGAATICGTIACACAIC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292 ATGGCGATGCAGGACAGGAAGACACTACTCTTGGAAGTCCACCTCGTTGTCCTGTTG 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               232 crerccaaerrecrearcaecrrerecaaaecaecrrearcrererrerecedaagaac 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cresisca de cresista de contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
APPLICANT: Li, Samuel X.
APPLICANT: Wang, Aijun
APPLICANT: Wang, Aijun
AAPLICANT: Skeiky, Yasir A.W.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121455C9
CURRENT APPLICATION NUMBER: US/09/606,421B
CURRENT FILING DATE: 2000-06-28
CURRENT FILING DATE: 2000-06-28
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 54.2; DB 4; Length 421;
Pred. No. 0.00023;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER FILE REPERBENCE: 210121.455C10
CURRENT APPLICATION NUMBER: US/09/630,940B
CURRENT FILING DATE: 2000-08-02
NUMBER OF SEQ ID NOS: 367
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 308 REASEQ FOR WINDOWS VERSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JS-09-630-940B-308/c

; Sequence 308, Application US/09630940B

; Patent No. 6737514

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wang, Tongtong
APPLICANT: Ran, Liqun
APPLICANT: Kalos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Fanger, Gary R.
APPLICANT: Ii, Samuel X.
APPLICANT: Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Skeiky, Yasir A.W.
Henderson, Robert A.
McNeill, Patricia D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.5%;
51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.5
Best Local Similarity 51.1
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52 GGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-606-421B-308
```

a ò ઠે

ò

ò

ò

```
280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340 ACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 AGCTGACCATCACTGTTCCACTTTCTTCATCATGCGGTCAAGGACACCAGGGTCC 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400 TTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCTGGGTCCTCTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196 ricicgricirngraadgecacciagricigiarricardaagcriaggaacricigicii 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 AAGGAGTCATGCCAAGCCATAGCTAGGCCACCAATCAGATTAAGAAATTCTGAGAAATCT
                                                                                                                   RESULT 29
US-09-854-133-281/C
Sequence 281, Application US/09854133
Patent NO. 6759504
GENERAL INFORMATION:
APPLICANT: Lodes, Michael J.
APPLICANT: Henderson, Robert A.
APPLICANT: Benson, Darin R.
APPLICANT: Benson, Darin R.
APPLICANT: Benson, THE THERAPY AND DIAGNOSIS OF LUNG CANCER; TITLE OF INVENTION: THE THERAPY AND DIAGNOSIS OF LUNG CURRENT APPLICATION NUMBER: US/09/854,133
CURRENT APPLICATION NUMBER: US/09/854,133
CURRENT FILING DATE: 2001-05-11
NUMBER OF SEQ ID NOS: 735
SEQ ID NO 281
LENGTH: 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
4.5%; Score 54.2; DB 4; Length 527;
Best Local Similarity 54.2%; Pred. No. 0.00025;
Matches 110; Conservative 0; Mismatches 93; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΒY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Zain, Sayeeda
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER I
TITLE OF INVENTION: THE MTS-1 GENE
MUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
     460 GTTAAGTAGCCTTTATCCCCAGC 482
                                                 136 GAGAGAGTGTAGTTATAACCATC 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460 GITAAGIAGCCITIAICCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136 GAGAGAGTGTAGTTATAACCATC 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-190-560-3/c
; Sequence 3. Application US/08190560
; Patent No. 5798257
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc feature
COCATION: (456)
OTHER INFORMATION: n=A,T,C or G
US-09-854-133-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 11530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Garden City
STATE: New York
COUNTRY: United St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                   ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGGTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340 ACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         256 AGCTGACCATCACTGTTGGTGTCCAGTTTCTTCATCATGCGGTCAAGGACACCAGGGTCC 197
                                                                                                                                                  AGTITICATITICITICCIGGGCIGCITATCIGGAAGCCITICAAAGAATICGITACACATC 293
                                                                                                                                                                                                                                                   TGGTCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                       232 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 173
                                                                                                                                                                                                                                                                                                                                                                                                           CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGAGTCATGCCAAGCCATAGCTAGGCCACCAATCAGATTAAGAAATTCTGAGAAATCT 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rrcrigerrcrrrergaggedecraerrcreraricardaggerraggarcrererrig 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGAGCTTGAACTTGTCA 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         112 cccrcrrrgcccgagracrrgrggaggrggacacaccarccagggcrrcrccaga 53
                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 281, Application US/09370838

Patent No. 644425

GENERAL INFORMATION:

APPLICANT: Bedes, Michael J.

APPLICANT: Lodes, Michael J.

APPLICANT: Bescriet, Heather

TITLE OF INVENTION: COMPOUNDS FOR THERAPY AND DIAGNOSIS OF

TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE

FILE REFERENCE: 210121-475C1

CURRENT APPLICATION NUMBER: US/09/370,838

CURRENT FILING DATE: 1999-08-09

BARLIER APPLICATION NUMBER: US 09/285,323

BARLIER APPLICATION NUMBER: US 09/285,323

MUMBER OF SEQ ID NOS: 289

NUMBER OF SEQ ID NOS: 289

SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.5%; Score 54.2; DB 3; Length 527; llarity 54.2%; Pred. No. 0.00025; Conservative 0; Mismatches 93; Indels
     Length 421;
                                                 0; Mismatches 143; Indels
  Score 54.2; DB 4;
Pred. No. 0.00023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (456)
OTHER INFORMATION: n=A,T,C or G
4.5%;
                       Best Local Similarity 51.1
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc feature
LOCATION: (456)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 110; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-370-838-281/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-370-838-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 281
LENGTH: 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        316
                                                                                                                                                                                                                                                                                                                                                                                                                                                        172
                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                      292
                                                                                                                                                                                                                                                                                                        358
                                                                                                                                                                                                                                                                                                                                                                                                         418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          196
     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

8

Gaps . 0

```
386 Argacciaraciaegaciaeadaciaeadaciaerentia and argacciae argacciae and argacciae and argacciae and argacciae and argacciae argacciae and argacciae a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  446 AGTITICATITICITICCIGGGCIGCITATICTGGAAGCCITICAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cresecaecrecesarchecaecrecriraerrereacristreasecrisaacristerea 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               326 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTTCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 54.2; DB 1; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3 Application US/08468946

Patent No. 5843686

GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Zain, Sayeeda
APPLICANT: Zain, Sayeeda
TITLE OF INVENTION: THE MTS-1 GENE
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
CITY: Garden City
STATE: New York
COUNTRY: United States
STREET: New York
COUNTRY: United States
                                         SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                     CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: DiGG110, Frank S.
REGISTAATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 78792Y
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4336
                                                                                                                APPLICATION NUMBER: US/08/469,277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 579 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 51.1:
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       146 GGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: li
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-468-946-3/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCACAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           238 ATTICIGCCIACTICITICCCITCTGCTTCAIGIGIACIACAAATAGICATIGCAIGCA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446 AGTITICATITICITICCIGGCIGCITATCIGGGAAGCCITICAAAGAATICGITACACAIC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    326 crercchaerrecrearcherererrereanageagerrenterererrerecenagaag 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386 ATGGCGATGCAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 54.2; DB 1; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/08469277

Sequence 13, Application US/08469277

GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Latanidin, Eugene
TITLE OF INVENTION: THE MTS-1 GENE
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCES: 9
CORRESPONDENCES: ADDRESSE:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
                                                                   PatentIn Release #1.0, Version #1.25
                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: DIGIGILO, Frank S.
REGISTRATION UNDRER: 31,346
REFERENCE/DOCKET NUMBER: 7879
TELECOMMUNICATION INFORMATION:
TELEFROME (516) 742-4343
TELEFAX: (516) 742-436
TELEFX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 579 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            146 GGGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Garden City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; MOLECULE TYPE: CDNA
US-08-190-560-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11530
                                                                                                                                                                                FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-469-277-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

Gaps ٠, د.

```
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 579 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         146 GGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 34
US-09-298-625-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-468-942-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                238 ATTICIGCCTACTICITCCCTICIGCTTCAIGIGIGIACIACAAAATAGICATIGCAIGCA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        446 AGITITICATITICTICCIGGGCTGCTTAICIGGGAAGCCTICAAAGAAITICGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 54.2; DB 2; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/08468942
Patent No. 5965360
GENERAL INFORMATION: DAGGED
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,946
FILING DATE: US/08/468,946
FILING DATE: US/08/468,946
FILING DATE: US/08/1995
ATYONEY/AGENT INFORMATION: 435
PRICING DATE: 31-JAN-1994
ATYONEY/AGENT INFORMATION:
NAME: Didiglio Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REJEPAK: (516) 742-4343
TELEPHONE: (516) 742-4343
TELEPHONE: (516) 742-4343
TELEPHONE: (516) 742-4366
TELEFEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LANGTH: S79 base pairs
TYPE: MICHAIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 146 GGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-468-942-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Ne
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
446 AGTITICATITICITICCIGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            386 ATGGCGATGCAGGACAGGACACACTACTCTTGGAAGTCCACCTCGTTGTCCTTTG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     358 TGGTCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTTCCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           478 -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206 cccrcrrrgcccgagracrrgrggaaggrggacacarccagggccrrcrccaga 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/09298625

Patent No. 6638504

GENERAL INPORMATION:

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY THE MTS-1 GENE

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY THE MTS-1 GENE

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY THE MTS-1 GENE

CURRENT APPLICATION NUMBER: US/09/298,625

CURRENT RILING DATE: 1995-04-23

PRIOR APPLICATION NUMBER: 08/468,942

PRIOR APPLICATION NUMBER: 08/468,945

PRIOR APPLICATION NUMBER: 08/190,560

PRIOR FILING DATE: 1994-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.5%; Score 54.2; DB 2; Length 579;
51.1%; Pred. No. 0.00026;
ZIP: 11530
COMPUTER REAABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,942
FILING DATE: 06-JUN-1995
CLASSIFATION: 435
PRIOR APPLICATION TOWARE: US/08/190,560
FILING DATE: 31-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Didiglio, Frank S:
REGISTRENCE/DOCKET NUMBER: 78792Y
TELECOMMUNICATION NUMBER: 31,346
REFERENCE/COCKET NUMBER: 78792Y
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION SANS UR:
TELECOMMUNICATION SANS UR:
TELECOMMUNICATION FOR SEQ ID NO: 3:
SEQUENCE: CHARACTERISTICS:
LEMENT FOR SEQ ID NO: 3:
SEQUENCE: CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 143;
```

```
1711 GGAGAGATCGAAGGGCTAGTGGGGCGTGGGGCCGCAGCCGAGGCCCGGGTGGAGGGTTCC 1770
                                                                                                                                                                                                                                                                                                                                                           247 IACTICTITCCCTICIGCTICATGIGIACIACAAAAIAGICATIGCAIGCAATGGIGAGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302 TTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATCATGGCGATG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTGCTGTCCAAG 183
                                                                                                                                                                            721 CICCCCCAGCCCTGICTCCTCCTCTTCTGCCCCCCGACTCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781 CGGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGGCCTCGCC 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.4%; Score 53.2; DB 1; Length 303;
Best Local Similarity 51.3%; Pred. No. 0.00036;
Matches 155; Conservative 0; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:

APPLICANT: Zain, Sayeeda
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin. Bugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 11530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALINE
OPERATING SYSTEM: PC-DOS/MS-DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 1, Application US/08190560
; Patent No. 5798257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: DiGiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879;
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IELEFAX: (516) 742-4343
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 303 bace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New York
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Garden City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 36
US-08-190-560-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-190-560-1
                                                                                                                                                                            661
                                               601
                                                                                           셤
                                                                                                                                                                     ò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14837, Application US/09949016
; Sequence 14837, Application US/09949016
; Retent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; FILE REPERBENCE: CLOOD.307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/231,768
; PRIOR FILING DATE: 2000-10-20
; PRIOR FILING DATE: 2000-10-03
; PRIOR FILING DATE: 2000-09-08
; NUMBER: OF SEQ ID NOS: 207012
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14837
; LENGTH: 86380
; TWENT HORS DATE: 2000-09-08
; TWENT BEST DE CONTROL OF THE CONTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              326 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           credecaecricecegercaecaecrecriraericreacirereaecricaacrierea 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----CGAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386 ATGGCGATGCAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ن</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.5%; Score 54; DB 4; Length 86380; 52.2%; Pred. No. 0.0031; ive 0; Mismatches 110; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 54.2; DB 4; Length 579;
51.1%; Pred. No. 0.00026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches 143; Indels
PRIOR APPLICATION NUMBER: 07/981,455
PRIOR FILING DATE: 1992-11-25
PRIOR APPLICATION NUMBER: 07/550,600
PRIOR FILING DATE: 1990-07-09
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FEATURE:
| NAME/KBY: misc feature
| LOCATION: (1)...(86380)
| OTHER INFORMATION: n = A,T,C or G
| US-09-949-016-14837
                                                                                                                                                                                                                                                                                                                                                                                                                            51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity 51.1
59; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 52.2
Matches 120; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         146 GGCACCCAT 136
                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-949-016-14837
                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Sim:
Matches 159;
                                                                                                                                                                                                                                                                                                         ; ORGANISM: Ho
US-09-298-625-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                     LENGTH:
```

g

a ð 쉱

ò g

8

유

ð

ઠે

ద

```
302 riciriceregecrecerateregeaagecricaaagaricerracacarcaregeare 243
242 CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCTTGTTGCTGTCCAAG 183
                                                                                                                          367 ICCTICATTATTTTGICCACAGCCAGAGGGICTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                        182 TTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAGCTGGGCAGC 123
                                                                                                                                                                                                                                                                                                                                                                  427 TCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 CCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGAGGGCACGCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 receggecicade recerritade recreative ricade critical en central en contra c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247 IACTICITICCCTICTGCTICAIGIGIACTACAAAAIAGICAIIGCAIGGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Squence 1, Application US/08468946

Faceur No. 5843686

GENERAL INFORMATION:

APPLICANT: Lukanidin, Eugene

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY

TITLE OF INVENTION: THE MTS-1 GENE

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER

STREET: 400 Garden City Plaza

CITY: Garden City Plaza

CITY: Garden City Content 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.0, Version #1.25
CUBRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,946
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

4.4%; Score 53.2; DB 2;
Best Local Similarity 51.3%; Pred. No. 0.00036;
Matches 155; Conservative 0; Mismatches 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIPICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/190,560
FILING DATE: 31-7AN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Digiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879ZY
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4366
TELER: 230 901 SAS UR
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 303 base pairs
nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 AT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-468-946-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-468-946-1
                                                                                                                    ò
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTCTACACTGGTCCAGG 366
                                                                                                              182 fracricárcia crircia da Adrica de Contra de Contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302 Tréricereggéregrirarereggaageérréaagaarrégriacacarcargegarg 243
367 TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                      122 réceggréfacaderécrétraderécretrarierisaderingaactriciéacerétrie 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 cccGaGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGAGGGCACGCC 3
                                                                                                                                                                                                                                  427 TCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٠.
ز
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 53.2; DB 1; Length 303; 51.3%; Pred. No. 0.00036; ve 0; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08469277
Fatent No. 5801142
GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: EN PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,277
FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3: SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Didiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879ZY
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4343
TELERAX: (516) 742-436
TELERX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 303 base pairs
TYPE: nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New York
: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 400 C.TTY: Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 37
US-08-469-277-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-469-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTGCTGTCCAAG 183
                                                                                                                                                                                                                                                   367 TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                                                                                182 iracricarcaccritorissaaakicascrrcaricristroriciocidakaaksistesiseen 123
                                                                                                                                                                                                                                                                                                                                                                                                                 427 TCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           247 IACTICITICCCTICIGCTICATGIGIACIACAAAAIAGICATIGCAIGCAATGGIGAGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
        302 ITCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATCATGGCGATG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               483 -----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      caedacadegaadacacadaacrerregaadrecacerecrestrerecererrecrererada 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----GAATTIGIGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receggereagerecritagerergaerierieageringaacrigereegererge 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 cccgagracrigidadadgigadacaccarcaacageccricicagaggeagecc 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 ccccadractricridadadedredacarcarccarccaedecerrerecadadedecec 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rrciriceriogeciocirarerosoaagecireaaagaarregriacaraaagaarg
                                                                                     CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ingcricalicaechichegaaageaconcarchereconnineeceaagaageage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY THE MTS-1 GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ٠.
ز
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 53.2; DB 4; Length 303; 51.3%; Pred. No. 0.00036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/09298625; Patent No. 638504; Batent No. 6638504; GENERAL INFORMATION:
APPLICANT: Lukanidin, Eugene; TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY 1 TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY 7 TITLE OF ILLNG DAPE: 1999-04-23; CURRENT FILING DATE: 1995-06-06; PRIOR APPLICATION NUMBER: 08/468,942; PRIOR FILING DATE: 1995-06-06; PRIOR FILING DATE: 1994-01-31; PRIOR APPLICATION NUMBER: 07/981,455; PRIOR APPLICATION NUMBER: 07/981,455; PRIOR APPLICATION NUMBER: 07/550,600; PRIOR APPLICATION NUMBER: 07/550,600; PRIOR APPLICATION NUMBER: 07/550,600; PRIOR APPLICATION NUMBER: 07/550,600; PRIOR PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 51.3
Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-298-625-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-298-625-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242
                                                                                     307
                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                 ò
                                                                                                                                                              셤
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                              TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                                                                            TCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                      182 Tracricarca gerreraga a de deserres de desercentra en contra de desergos de defensos de desergos de desergos de desergos de defensos d
                                                                            242 cagcacaggaagacacacrerrogaagreceecrecrecrecrecrerrocrerceas 183
                                                                                                                                                                                                                                                                                                                                                                                                         122 rcccegercascacrerrascrerrascrierrascriesascriercacereres 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 cccgadráctrigrogaadogrogacarcarcagodocrircrocagogogodoco 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.4%; Score 53.2; DB 2; Length 303; 51.3%; Pred. No. 0.00036; tive 0; Mismatches 138; IndelB 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:

APPLICANT: Zain, Sayeeda

APPLICANT: Lukanidin, Eugene

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY

TITLE OF INVENTION: THE MTS-1 GENE

NUMBER OF SEQUENCES: 9

CORRESPEDINECES: 9

CORRESPEDINECES: SCULLY, SCOTT, MURPHY & PRESSER

STREET: 400 Garden City Plaza

CITY: Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IN PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,942
FILING DATE: 06-UN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: vo-vc..
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/190,560
FILING DATE: 31-JAN-1994
ATTORNEY, AGENT INFORMATION:
NAME: DIGIGILO, FRANK 31,346
REFERENCE/DOCKET NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879ZY
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4346
FELERX: (516) 742-4366
FELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
TOWATH: 303 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 39
18-08-468-942-1/c
Sequence 1, Application US/08468942
Patent No. 5965360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Garden Cit;
STATE: New York
COUNTRY: United
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-468-942-1
                                                                                                                                                                                                                                                                                                                            427
307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ~
                                                                                                                                                              367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                        g
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                              ò
```

243

```
Sequence 1, Application US/08322742
                                                                                                                                                                                                                Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: linear
US-08-322-742-1
                                                                                                                                                                      STREET: 225 Fr
CITY: Boston
STATE: Massach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGGTCTGGAAGGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340 ACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316 AAGAAGTCATTGCACATGACAGTGATGAGTGCCAGGAAAACAGCATACTCCTGGAAGTCC 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256 ACCTGCTGGTCGTCTTCTCATCCAGGTTGCCCATCAGCTTCTTCAGCCCCTCCTCATCC 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400 TITITGAITITICCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196 ACTITCTCCCCCACAAGCTGGGCAGCTCCTTGTGCAAAGTTCCTTCATTTCCCCCTTA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.4%; Score 52.8; DB 1; Length 452;
Best Local Similarity 54.0%; Pred. No. 0.00055;
Matches 108; Conservative 0; Mismatches 92; Indels
                                                                                                                                        Sequence 1, Application US/07662198B
Patent No. 5562528
GENERAL INFORMATION:
APPLICANT: Sager, Ruth
APPLICANT: Lee, Sam W.
APPLICANT: Lomasetto, Catherine
TITLE OF INVENTION: CANCER DIAGNOSIS AND THERAPY
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESSS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Massachusetts
COUNTRY: U.S.A.
ZIE: 02110-2804.
ZONPUTER: U.S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/662,198B
FILING DATE: 19910228
CLASSIFICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/049001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460 GTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  136 crcagcrraaacrraicecc 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: NUCLEIC ACID STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                        AT 1
                                                                                                                           US-07-662-198B-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
TOPOLOGY:
US-07-662-198B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
  8
```

RESULT 42 US-08-322-742-1/c

```
316 AAGAAGTCATTGCACATGACAGTGATGACAGGAAAACAGCATACTCCTGGAAGTCC 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340 ACTITIGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    400 TITIGATITICCAAAAAICCAGGGAACTCCTTITCCATGAGTACTCTCAGGTCCTCTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               256 Accrecrestracionaricas de destracción de la Accrecrecación de la Accrecación de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196 ACTITICICCCCCACAAAGCIGGCAGCICCIIGIGCAGAAGIICCTICAIITCCCCCIIA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.4%; Score 52.8; DB 1; Length 452;
Best Local Similarity 54.0%; Pred. No. 0.00055;
Matches 108; Conservative 0; Mismatches 92; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: MASSACHUSELES
COUNTYER IS ASSACHES
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: MOORDERICE (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/322,742
FILING DATE:
PRIOR APPLICATION NUMBER: 07/938,823
FILING DATE: September 1, 1992
APPLICATION NUMBER: 07/938,23
FILING DATE: February 28, 1991
APPLICATION NUMBER: 07/844,296
FILING DATE: February 28, 1991
APPLICATION NUMBER: 07/852,216
FILING DATE: February 28, 1991
APPLICATION NUMBER: 07/852,216
FILING DATE: February 28, 1991
APPLICATION NUMBER: 07/852,216
FILING DATE: NEDRUARION:
MAME: Fraser, Janie K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/048003
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sager, Ruth
TITLE OF INVENTION: CANCER DIAGNOSIS AND THERAPY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-702-705-1585/c
US-09-702-705-1585/c
Sequence 1585, Application US/09702705
Patent No. 6504010
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     460 GTIAAGIAGCCTITATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136 CTCAGCTTGAACTTGTCGCC 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (617) 542-5070 TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: double
```

```
238 ATTICIGCCTACTICITICCCTTCTGCTTCATGTGTACAAAATAGTCATTGCATGCA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          364 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304 ATGGCGATGCAGGACAGGACACACACTCTTAGAAGTCCACCTCGTTGTCCTGTTG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478 CCAGC------GAATTTGTGAAATGTAAACATCGTGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364 AGTITICATITICITICCIGGGCIGCITATCTGGGAAGCCITCAAAGAATICGITACACATC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           304 ATGGCGATGCAGGACAGACACACTACTCTTAGAAGTCCACCTCGTTGTCCTTG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358 TGGTCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            244 crericcia de cresciones de contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9.
                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Fanger, Gary
APPLICANT: Federick, Tom
APPLICANT: Vederick, Tom
APPLICANT: Retter, Marc
APPLICANT: Marc
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: 120121.478C9
CURRENT APPLICATION NUMBER: US/09/614,124B
CURRENT FILING DATE: 2001-07-11
NUMBER OF SEQ ID NOS: 1668
SOFTWARE FEASTSO for Windows Version 3.0
SEQ ID NO 1585
LENGTH: 392
                                                                                                                                                                                 Query Match
4.4%; Score 52.6; DB 4; Length 392;
Best Local Similarity 50.8%; Pred. No. 0.00058;
Matches 158; Conservative 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.4%; Score 52.6; DB 4; Length 392;
Best Local Similarity 50.8%; Pred. No. 0.00058;
Matches 158; Conservative 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5-09-614-124B-1585/c
Sequence 1585, Application US/09614124B
Patent No. 6630574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64 GGCACCCCAT 54
            ; ORGANISM: Homo sapiens
US-09-736-457-1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-614-124B-1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304 ATGGCGATGCAGGACAGGAAGACACAGTACTCTTAGAAGTCCACCTCGTTGTCCCTGTTG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        244 crerccia drugercia reactiva e de case de contra de c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               184 CTGGGCAGCTCCCGGGTCAGCAGCTCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGC-----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 cécrértrigecegagracritéridadagéricadacarcaricadegécerrerécada 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Lodes, Michael A.
APPLICANT: Lodes, Michael A.
APPLICANT: Fanger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Retter, Darrick
APPLICANT: Retter, Darrick
APPLICANT: Fan, Lidyn
APPLICANT: Fan, Lidyn
APPLICANT: Fan, Lidyn
APPLICANT: Fan, Lidyn
APPLICANT: Wang, Allone
APPLICANT: Manion, Jane
APPLICANT: Wang, Allone
APPLICANT: W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
APPLICANT: VGGVIC...
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Pan, Liqun
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FestSEQ for Windows Version 3.0
SEQ ID NO 1585
LENGTH::392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.4%; Score 52.6; DB 4; Length 392;
50.8%; Pred. No. 0.00058;
iive 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 50.8
58; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCACCCAT 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Simi
Matches 158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
```

g

셤 ઠે g ઠે q

ઠે

g

ઠે 용

8

.

ò	418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCC 477
đ	184 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 125
ò	478 CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
qa	124 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGCCTTCTCCAGA 65
ó	529 IGAGATGGCAT 539
QQ	64 GGGCACGCCAT 54

Search completed: August 17, 2005, 22:33:07 Job time : 247 secs

Н

```
Search time 793 Seconds (without alignments) 9823.210 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ggaactaaaaaaaaaacttta........ggggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
3: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
6: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
21: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
25: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
25: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
27: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
28: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
29: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
20: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
25: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
26: /cgn2
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7316285 seqs, 3248459403 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                            August 17, 2005, 22:20:57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                         - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                Run on:
```

	•	•						
	Description	Sequence 16, Appl	Sequence 17, Appl	Sequence 1, Appli	Sequence 586, App	Sequence 13, Appl	Sequence 2350, Ap	Sequence 847, App
	ID	US-10-735-577-16	US-10-735-577-17	US-10-044-090-1	US-09-925-301-586	US-09-997-003-13	US-09-880-107-2350	17 US-10-172-118-847
	DB	19	19	13	σ	10	σ	17
		1199	1199	1124	1893	1893	649	649
de	Query	100.0	100.0	58.7	52.9	52.9	50.1	50.1
	Score	•	1199	703.4	634	634	601	601
	sult No.	1	7	٣	4	Ŋ	9	7
	Result No.	;	υ	ט	υ	υ	υ	υ

AAGCTTATCTGGTATTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120

1 1 1

8 8

ò

a

8

상 음

8 8

6 B 6

Ω

B & B & B & B

\$ B \$ B \$ B \$

8 & 8 & 8 & 8 & 8

```
Metastası
                                                                                                                                        for Inhibiting Tumor Growth and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                   09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGATTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1019 GCAGATICCTIAAGCGACCCTITGGGACAACTCTIAICAGGGAGGAGGAGCGAACTGCTCAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tregreregrecerreaaccrrrescesaaccerescesaccrescesaccrasses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGTGTCGTCGTTGAAGCCTTGGCCGAGGCGGGGGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGGCGGAGGCGCGCGGCGGCTGTGCGCCTTTCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGTGGGTAGAGGGAGGCGCGCGGGAGCGGGAGGCCTGGCCGGCGCCTCGCCAGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                               Length 1199
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                               DB 19;
                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                        Methods
                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 1199; Best Local Similarity 100.0%; Pred. No. 0; Matches 1199; Conservative 0; Mismatches
                                                                 Sequence 17, Application US/10735577
Publication No. US20040142897A1
GENERAL INFORMATION:
APPLICANT: Waisman, David M.
TITLE OF INVENTION: Compositions and Methods
FILE REFERENCE: MESO-009
CURRENT FILING DATE: 2003-12-12
PRIOR APPLICATION NUMBER: US 60/433,140
PRIOR PILING DATE: 2002-12-13
PRIOR PILING DATE: 2002-12-13
NUMBER OF SEQ ID NOS: 160
SOFTWARE: Microsoft Word
                                                                                                                                                                                                                                                                                                                          ORGANISM: mammalian
                                     SULT 2
-10-735-577-17/c
                                                                                                                                                                                                                                                                                              1199
                                                                                                                                                                                                                                                                                                                                          US-10-735-577-17
                                                                                                                                                                                                                                                                              SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                              420
                                                                     180
                                                                                                       240
                                                                                                                                        240
                                                                                                                                                                                                        300
                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                     180
                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGCCTGCGCCAGTGGAGGGGCGGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGCCTGCGCCAGTGGAGGGGCGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
AAGCTTATCTGGTATTTAACTTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                               TCCAGGICCTICATTATTITGICCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGTGTGTGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCTGGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGTGGGTAGAGGGAGGGGGGGGGGGGGAGGGAGGCTTGGGCGGCTGGGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTGGGTAQAGGGAGGGGGGGGGGGGGGGGGGGGGGGCCTGGCGGGGGGCGCTCGCCAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCCCCAGCCCTGTCTCCTCCCCCTTTTCTTCCTCCCCCGACTCCCCCGACCCCGGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCCCGCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG
                                 TITACATITIGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGACGCTGGGCCTGGGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACCCGGCCGTCCTGCGGGTGGGCACGCTGGCCAGAACCAGAGGTAACCGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGACGCGGGGGGGAGAGGCGAGCGCGGCGGCTGTGCGCTTCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                   121
                                                                                                     181
                                                                                                                                                                        241
                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                 121
                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
```

8 6 ò Д g

ઠે ያ ያ

QQ ઠે ద ઠે a

8

S 8

```
300
                                                                                                                                                                                                                     420
 240
                                  494
                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                       rereceracirericiecricescricareneraciacaaaaraereariscare 434
                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 374
                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACCAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 314
                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCGTGTTCCATTTGAGATGGCATT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGGGCG------GCTGGGCCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                       creegceaecreeacecegegegagagegegegegegegegegererecerrage
                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 586, Application US/09925301
Sequence 586, Application US/09925301
Fatent No. US20020052308A1
GENERAL INFORMATION:
TYLLE OF INVENTION:
TYLLE OF INVENTION: Nucleic Acids, Proteins and
FILE REFERENCE: PA.106
CURRENT PAPLICATION NUMBER: US/09/925,301
CURRENT PAPLICATION NUMBER: PCT/US00/05882
FRIOR FILING DATE: 2001-08-10
FRIOR APPLICATION NUMBER: PCT/US00/05882
FRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1694
SOFTWARE: PATENTIN VOT: 2.0
SEQ ID NO 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (1883)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (1184)
OTHER INFORMATION: n equals a,t,g, o
NAME/KEY: misc feature
LOCATION: (1865)
OTHER INFORMATION: n equals a,t,g, o
NAME/KEY: misc feature
LOCATION: (1883)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGGCGCTCC 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCAGGGCGCTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature.LOCATION: (1184)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-925-301-586/c
                                                                                                                                                                                                                                                         373
                                                                       241
                                                                                                       493
                                                                                                                                                301
                                                                                                                                                                                  433
                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
 181
                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                     g
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
 8 6
                                                                       8 6
                                                                                                                                à
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/10044090
; Bediaction No. US2020137081A1
; GENERAL INFORMATION:
; APPLICANT: Olga Bandman
; TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
; FILE REFERENCE: PA-0028 US
; CURRENT APPLICATION NUMBER: US/10/044,090
; CURRENT APPLICATION NUMBER: US/10/044,090
; NUMBER OF SEQ ID NOS: 850
; SOFTWARE: PERL PROGRAM
; SOFTWARE: PERL PROGRAM
; SOFTWARE: PERL PROGRAM
                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                                              961 GAACCCGGCCGTCCTGCGGGTGGGCCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                                                   1021 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            419 CGCCCACGCCCTCGCTCCCGCACCCGCCTCGCAGAGGCCTCGCCCCCCAGAC 360
                                                                                                                                            841 AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC 900
                                                                                                                                                                 359 AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC 300
                                                                                                                                                                                                                                        299 ATCCCCACCCTGAGCCCTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA 240
                                                                                                                                                                                                                                                                                                                 239 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAGAACCAGAGGTAACCGGCTCTGC 180
                                                                                                                                                                                                                                                                                                                                                                                          GECCACCTACGGATCTAGGAATTACTTGCTTGGATGACCCTGCAGGGAGTGGCACGTGGAG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG 554
                                  420
                                                                                                                                                                                                                       119 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 60
                        CTCCCCCAGCCCTGTCTCCTCCCCCTCTTCCTGCCCCCGACCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGAACTAAAAAAGAACTTTATTTATGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                       CGGCCCACGCCCTCGCTCCCGGACCCGCCACGAGGCCTCGCCCCGCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              58.7%; Score 703.4; DB 13; Length 1124; llarity 98.6%; Pred. No. 2.2e-197; Conservative 0; Mismatches 1; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
| NAME/KEY: misc feature | OTHER INFORMATION: Incyte ID No. US20020137081A1 400788.4 | NAME/KEY: unsure | NAME/KEY: unsure | OTHER INFORMATION: 1014, 1054, 1119 | OTHER INFORMATION: a, t, c, g, or other US-10-044-090-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 723; Conserval
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
US-10-044-090-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1124
                                  479 (
                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
721
                                                                       781
```

유

8 6 B g

셤 ò

```
(416 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCA 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1356 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGTGGTCCGTTGAAGCCTTGGCCGAAGCGCGGCGGACGCTGGGCGAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1836 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 52.9%; Score 634; DB 10; Length 1 Best Local Similarity 100.0%; Pred. No. 1.1e-176; Matches 634; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CIGGACGCGGGGGGAGAGGCGAGCGCGGGGGC 634
                                                                                                                                    O
                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                                                                                                                          υ
                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
LOCATION: (1893)..(1893)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                    or
                                                                                                                                                                                                     or
                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                  a,t,g,
                                                                                                                                                                                                   a,t,g,
                                                                                                                                                                                                                                                                                                                                         a,t,g,
                                                                                                                 LOCATION: (1184)..(1184)
OTHER INFORMATION: n equals
FEATURE:
                                                                                                                                                                NAME/KEY: misc feature
LOCATION: (1865)..(1865)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                  FEATURE:
NAME/KEY: misc feature
LOCATION: (1883)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: misc feature
LOCATION: (1887)
..(1887)
FEATURE:
SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 13 LENGTH: 1893 TYPE: DNA ORGANISM: Homo sapiens
                                                                                                   NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                 FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1477
                                                                                                                                                    ö
                                                                                                                                                                                                                                                                     1776 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1296 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGCGGCGGCGGCGAGCTGGGCGAG 1237
                                                                                                                                                                                                                  1716 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 1657
                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAACTGCTCATT 1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1476 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAATCCA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGGAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGTGCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                   GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                    Gaps
                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13, Application US/09997003
; Sequence 13, Application US/09997003
; Publication No. US20030203361A1
; GENERAL INFORMATION:
    APPLICANT: Rosen et al.
    TILE OF INVENTION:
    TILE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
    TILE REFERENCE: PA003P1
; CURRENT APPLICATION NUMBER: US/09/997,003
; CURRENT FILING DATE: 2001-11-30
; FRIOR APPLICATION NUMBER: unassigned
; PRIOR FILING DATE: 2001-11-30
; PRIOR FILING DATE: 2000-08-11
; PRIOR FILING DATE: 2000-08-13
; RIUR STLING DATE: 1999-08-13
; NUMBER OF SEQ ID NOS: 56
                                                                                                                 Length 1893;
                                                                                                                                                0; Indels
                                                                                                                 Query Match 52.9%; Score 634; DB 9; Lv
Best Local Similarity 100.0%; Pred. No. 1.1e-176;
Matches 634; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGCGGAGAGGCGAGCGCGGCGGCGCC 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGGGAGAGGCGAGCGCGGGGC 634
                    υ
                                                                   or
                    ö
LOCATION: (1887)
CTHER INFORMATION: n equals a,t,g,
NAME/KEX: misc feature
LOCATION: (1893)
COTHER INFORMATION: n equals a,t,g,
US-09-925-301-586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
US-09-997-003-13/c
                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                       1656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1236
                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                    $ B $ B $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
장
연
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

ò

ò

1597

240

1657

180

1777

9

ö

1717

120

1477

420

540

480

S

```
GCGAATTTGTGAAAGTATAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649 GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITICCTAAGTGTCCTGATCTCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTTGTTTTCCAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                     Breast Cancer Patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 50.1%; Score 601; DB 17; Length 649; Best Local Similarity 99.7%; Pred. No. 3.7e-167; Matches 623; Conservative 0; Mismatches 0; Indels 3
                                                                                                                                                                                                              GAPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Linsley, Peter
APPLICANT: Mao, Mao, Mao,
APPLICANT: No, T. Veer, Laura
APPLICANT: Van de Vijver, Marc
APPLICANT: Van de Vijver, Marc
APPLICANT: Van de Vijver, Marc
APPLICANT: Bernards, Rene
TITLE OF INVENTION: Diagnosis and Prognosis of Bre
TITLE OF INVENTION: Diagnosis and Prognosis of Bre
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-06-14
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 847
LENGTH: 649
                         625
                                                  51 CTGGACGCGGCGGAGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
CRGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NM 002966
DATABASE ENTRY DATE: 2001-06-18
US-10-172-118-847
                                                                                                                                                              Sequence 847, Application US/10172118; Publication No. US20030224374A1
                                                                                                                                                                                                      GENERAL INFORMATION
                                                                                                                                           -10-172-118-847/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                         ò
                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTTTTTCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541 TTGGTGTGGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGAACGCTGGGCCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITACATTIGCTAAGIGTCCTGATCTCTCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                             Sequence 2350, Application US/09880107

Sequence 2350, Application US/09880107

Sequence 2350, Application US/09880107

GENERAL INFORMATION:

APPLICANT: HOTHER, Darci T.

APPLICANT: Scherf, Uwe

APPLICANT: Gene Logic, Inc.

TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer

TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer

FILE REFERENCE: 44921-5028-WO.

CURRENT APPLICATION NUMBER: US 60/211,379

PRIOR APPLICATION NUMBER: US 60/211,379

PRIOR APPLICATION NUMBER: US 60/237,054

PRIOR PILING DATE: 2000-10-02

NUMBER OF SEQ ID NOS: 3950

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 2350

LENGTH: 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . OTHER INFORMATION: Genbank Accession No. US20020142981A1 M38591
US-09-880-107-2350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 601; DB 9; Length 649;
Pred. No. 3.7e-167;
0; Mismatches 0; Indels
  1236 CTGGACGCGGGGGGAGAGCGAGCGCGCGCGGCC 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

ð

8

590 120 530 180 240

480

231

52

```
301 GTGAGGCCCGCAATTAGGGAAAAGGACCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTCTTTATCCCCA
                                                                                                                                                   170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                  110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                       541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 AAGCITATCTGGTAITTAACTITICTITCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ## APPLICANT: "GLIS POON
## APPLICANT: Louis POON
## APPLICANT: Louis POON
## APPLICANT: Louis POON
## APPLICANT: Under Wood
## APPLICANT: Under Wood
## APPLICANT: Under Wood
## APPLICANT: Wisbah MALIX-HALL
## TITLE OF INVENTION: SODIUM CHANNEL REGULATORS AND MODULATORS
## CURRENT APPLICATION NUMBER: US/10/487,337
## CURRENT PILING DATE: 2004-02-20
## PRIOR APPLICATION NUMBER: PGT/GB02/03852
## PRIOR APPLICATION NUMBER: GB 0120238.1
## PRIOR APPLICATION NUMBER: GB 0120238.1
## PRIOR FILING DATE: 2001-08-20
## PRIOR FILING DATE: 2001-08-20
## RIOR PILING DATE: 2001-08-20
## RIOR PILING DATE: 2001-08-20
## RIOR PILING DATE: 2001-08-30
## SEQ ID NO 7
## TOWATH: PATENTION NUMBER: PATENTION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50.1%; Score 601; DB 20;
99.7%; Pred. No. 3.7e-167;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                      CTGGACGCGGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGGGGAGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/10487337; Publication No. US20040248207A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity >>..
Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: (112)..(402) OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kenji OKUSE
APPLICANT: Mark BAKER
APPLICANT: Louis POON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
US-10-487-337-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-487-337-7
                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                      601
         121
                                                                                                                                                                                                                                                                                                                                                                                                             51
                                                ద
                                                                                                                     ò
                                                                                                                                                                  음
                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           649 GGAACTAAAAAGGAACTTTATTTATTGAGGGCAAGGGGGATGCAAACAATTACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTAICTGGTAITTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                            TTGGTGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rccaggrccrrcarrarrrgrccacagagggrcrrrrrgarrrccaaaaarcca 231
                                                                                                                     52
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter S.
APPLICANT: Mao, Mao
APPLICANT: Nao, Mao
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Van 't Veer, Marc J.
APPLICANT: Van 't Veer, Marc J.
APPLICANT: Use Wilver, Marc J.
APPLICANT: Bernards, Rene
TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients
TILLE OF INVENTION: Diagnosis and Prognosis of Breast
CURRENT FILING DATE: 2001-18
PRIOR APPLICATION NUMBER: 60/298,918
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 10/172,118
PRIOR PILING DATE: 2002-05-14
PRIOR FILING DATE: 2002-05-14
SPIOR FILING DATE: 2002-05-14
                                                                                             TTGGTGTGGTCGTTGAAGCCTTGG-CGAGGCGCGGGCGGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       589 AAGCTTATCTGGTATTTAACTTTTCTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 50.1%; Score 601; DB 18; Best Local Similarity 99.7%; Pred. No. 3.7e-167; Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                           CTGGACGCGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                              CTGGACGCGGGGGGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 847, Application US/10342887
; Publication No. US20040058340A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-342-887-847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                     RESULT 8
US-10-342-887-847/c
                                                            541
                                                                                                                  110
                                                                                                                                                                           601
                                                                                                                                                                                                                                 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          290
                                                                                                               g
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D
   윤
                                                      ò
                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

120 530 180 240 411

590

```
APPLICANT: Wyeth
APPLICANT: Worth
APPLICANT: Worth
APPLICANT: Wounts, William
APPLICANT: Wounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REPERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 6214
***CHARCAGE AND ACT OF THE PROTEASE AND ACT OF THE PROTEASE AND ACT OF THE PROTECT AN
                                                                                                                            540
                                             480
                                                                                  171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                   111
                                                                                                                                                                                                             TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGACGCTGGGCCAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  231
      231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                      25
    TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTATCCCCA
                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                         TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGCGGCGGCGCGCGCGGCGGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 601; DB 21;
Pred. No. 3.7e-167;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                CTGGACGCGGGCGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                     CTGGACGCGGGGGGAGAGCCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 6214, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 50.1%;
Best Local Similarity 99.7%;
Matches 623; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
CORGANISM: Homo sapiens
US-10-956-157-6214
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
US-10-956-157-6214/c
    290
                                           421
                                                                                     230
                                                                                                                            481
                                                                                                                                                                   170
                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                      110
                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
                                ठ
                                                                        g
                                                                                                             ò
                                                                                                                                                        g
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wyeth
APPLICANT: Wounts, William
APPLICANT: Mounts, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 10.081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: Patentin version 3.2
SEQ ID NO 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                             540
                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                           TTGGTGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGICCTICATTATITIGICCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                     231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTCCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATICCTIAAGCGACCCTITGGGACAACICTIAICAGGGAGGGGGGGGACTGCTCAIT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCCCAATTAGGGAAAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                     52
                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 601; DB 21;
Pred. No. 3.7e-167;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                              625
                                                                                                                                                                                                                                                                                                                                                                                                                      27
                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 979, Application US/10956157; Publication No. US20050118625A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
US-10-956-157-979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-956-157-979/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Simil
Matches 623;
                                                                                290
                                                                                                                                                                 230
                                                                                                                                                                                                                                                  170
                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350
                                         361
                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                      51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                              601
                                       ઠે
                                                                   g
                                                                                                          8
                                                                                                                                                        요 상
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6
```

```
546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                      361
                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                      181 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG 122
                                                                                                                                                                                                                                                                                                                                                                                                        541
                                       421 cagariccitaaaccaccerriccaacaacrerrarcaggaaggaggaacracrerr 362
                                                                                                                                                                                                                                           CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG 421
                                                                                                                                                                                                                                                                                                                      GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAG 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOREMEAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2000-04-30

FRIOR APPLICATION NUMBER: US 60/218,006

FRIOR PELING DATE: 2000-07-12

FRIOR APPLICATION NUMBER: US 60/193,483

FRIOR PILING DATE: 2000-04-20

FRIOR PILING DATE: 2000-03-29

FRIOR PILING DATE: 2000-02-44

FRIOR APPLICATION NUMBER: US 60/167,363

FRIOR PILING DATE: 1909-09-24

FRIOR PILING DATE: 1999-11-23

FRIOR APPLICATION NUMBER: US 60/166,358

FRIOR PILING DATE: 1999-09-28

FRIOR FILING DATE: 1999-09-28

FRIOR FILING DATE: 1999-09-28

NUMBER OF SEQ ID NOS: 325720

SOFTWARE FRIENG DATE: 1999-08-09
                                                                                                                                                                                   241 CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGCGAGCTGGCGAGC
                                                                                 242 CTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCAATGG
                                                                                                                                                              TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                             121 CGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGCGAGCTGGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        605 dadedececeriedeccedecedaecreaecriedecedadecededededederedededed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       532 GATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 13; Length 608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 577.4; DB 13;
Pred. No. 3.6e-160;
1; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 261591, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 97.0%;
Matches 587; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-027-632-261591/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Human
US-10-027-632-261591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 261591
LENGTH: 608
                                                                                                                                                              302
                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                             ઠે
                                                                                                                g
                                                                                                                                                            ò
                                                                                                                                                                                               g
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601 GAACTAAAAAAGACCTTTATTTATTTGAGGGCAAGGGGATGCAACCAATNCAAAAATCAAA 542
                                                                                                                      TTGGTGTGTCCCTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCTGGGCGAAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 AGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGG 422
230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                              GCGAATTTCTGAAATGTAAAACATCATGCTTTCCATGGCGTTTCCATTTGAGATGGCATT
                                                                                                                                             110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 GAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 663;
                                                                                                                                                                                                                                                                                                                                                                                           JOURGALD INFORMATION: Nucleic Acids, Proteins, and Antibodies TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PAI33P1.

CURRENT APPLICATION NUMBER: US/10/264,049

CURRENT PILING DATE: 2002-10-04

PRIOR APPLICATION NUMBER: PCT/US01/18569

PRIOR PILING DATE: 2001-06-07

PRIOR FILING DATE: 2000-06-07

NUMBER OF SEQ ID NOS: 4360

SOFTWARE: PATCHIN VET: 3.1

SEQ ID NO 1114

LENGTH: 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49.7%; Score 595.8; DB 17; 99.5%; Pred. No. 1.3e-165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                      CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                                       CTGGACGCGGGCGGAGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEX: misc feature
NACATION: (661). (661)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                       ; Sequence 1114, Application US/10264049; Publication No. US20040005579A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (553)..(553)
OTHER INFORMATION: n equals a,t,g,
FRATURE:
NAME/KEY: misc_feature
LOCATION: (602)..(602)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: misc feature
LOCATION: (656)..(657)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: (623)..(623)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 597; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: (553)..(553)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                        US-10-264-049-1114/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-264-049-1114
                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                         481
                                                                             170
                                                                                                                                                                                                    601
                                                                                                                                                                                                                                       51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                         g
                                                                                                                                                    g
                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                     ò
                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
```

ö

σ

ö

a

g ò g ે ద ઠે 원 장

ò

```
1071
                                                                               546
                                                                                                                                                245 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGAAAAGTGTA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACCCTGGCGCAGAACCAGAGGTAAC 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1072 CACGTGGAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG 1131
                                          591
                                                                                                                          651
                                                                                                                                                                                                                                                                                                                               GECAGGGCGCTCCCCCAGCCCTGTTCTCCCCCCTCTTCCTGCCCCCCGACTCCCCCGAACT
                                                                                                                                                                                                                                                                                                                                                                                  831
                                                                                                                                                                                                                                                                                                                                                                                                      365 CCGGGCGCGGGCCCACGCCCTCCCCGGACCCGCCTCGCAGAGGCCTCGCCC 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        951
                                                                                                                                                                                                              711
                                                                                                                                                                                                                                                    426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              305 GCCCCAGACAGAGGGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 246
                                                                                                                                                                                                                                                                                              GGCAGGGGCTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCGACC 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGTGKAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125 CGGCTCTGCGGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG
                                                              GCCCCAGACAGAGCGTTCTTGTAAACTTCTCTGTAGAAACGGTCCTGCTCTCGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1012 CGGCTCTGCGCGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                  CCGGGCGCGCGCCCACGCCCTCCCTCCCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                       CTGGGCGAGCTGGACGCGGGGGGGAGAGCGCGCGCGCGGGCTGTGCCTTAGT
                                                                                                                                                                                                                                  TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTA
                                                                                                                                                                                                              Gaps
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 890, Application US/09920300A
Sequence 890, Application US/09920300A
Patent No. US2020136728A1
Setting Gordon E.
APPLICANT: Meagher, Madeleine Joy
APPLICANT: W. Jiangohun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
FILE REFERENCE: 210121.547
CURRENT APPLICATION NUMBER: US/09/920,300A
CURRENT FILING DATE: 2001-07-31
NUMBER OF SEQ ID NOS: 1789
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 890
17; Indels
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: misc_feature
LOCATION: 11, 351, 379, 559
JOTHER INFORMATION: n = A,T,C or G
587; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1132 GGGTC 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
US-09-920-300A-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 571
                                                                                                                          592
                                                                                                                                                                 545
                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                              712
                                                                                                                                                                                                                                                                                                                                        425
                                                                                                                                                                                                                                                                                                                                                                                  772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                  유
                                                                                                            ठे
                                                                                                                                                      g
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAAC 1011
                                                                                                                       305 GCCCCGGACACGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 246
                                                                                                                                                                                                                                                                                                                                                                                    245 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTA 951
                                                                                                   GGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTGCCCCCGACTCCCCGACC 771
                                                                                                                                                                                                                                                                       GCCCCAGACAGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERALL INVENTATION:
GENERALL INVENTION:
GENERALL INVENTION:
INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR PELING DATE: 2000-04-12
PRIOR PELING DATE: 2000-04-20
PRIOR PELING DATE: 2000-04-20
PRIOR PELING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/198,218
PRIOR PELING DATE: 2000-02-24
PRIOR PELING DATE: 2000-03-29
PRIOR PELING DATE: 1999-11-28
PRIOR PELING DATE: 1999-11-28
PRIOR FILING DATE: 1999-10-28
PRIOR PELING DATE: 1999-09-28
PRIOR PELING DATE: 1999-09-09-28
PRIOR PELING DATE: 1999-09-09
                                                                                                                                                                                     CCGGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48.2%; Score 577.4; DB 17; Length 608; 97.0%; Pred. No. 3.6e-160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
US-10-027-632-261591/c
; Sequence 261591, Application US/10027632
; Publication No. US20030204075A9
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1132 GGGTC 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 GGGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-261591
                                                                                                                                                                                                                                                                                                                                                                                                                                              952
                                                         485
                                                                                                 712
                                                                                                                                           425
                                                                                                                                                                                     772
                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                       832
                                                                                                                                                                                                                                                                                                                                                            892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1072
```

g

ò g 8 g ઠે

```
ö
   ö
                                                                                                           120
                                                                                                                                                                                                                                                      240
                                                                                                                                            147
                                                                                                                                                                                180
                                                                                                                                                                                                                 207
                                                                                                                                                                                                                                                                                     267
                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                  387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                567
                                      9
                                                                      87
                                                                                                                              88 AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTGCTTGTCAAATGAGAGTTANATTTTATT
                                                                                                                                                                                TITACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                   148 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             448 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28 GNAACTAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                       208 GCANATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTGGGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                      1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Meagher, Madeleine Joy
APPLICANT: Meagher, Madeleine Joy
APPLICANT: Meagher, Madeleine Joy
APPLICANT: Meagher, Madeleine Joy
APPLICANT: Will Applicant: Will Applicant: APPLICANT: Jang, Yuqiu
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: COMPOSITIONS OF COLON CANCER
FILE REFERENCE: 210121.547C2
CURRENT PELLING DATE: 2002-03-17
NUMBER OF SEQ ID NOS: 1982
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 571;
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

44.8%; Score 537; DB 16;
Best Local Similarity 98.7%; Pred. No. 3.3e-148;
Matches 537; Conservative 0; Mismatches 7;
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jor G 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 890, Application US/10099926; Publication No. US20030166064A1; GENERAL INFORMATION:
   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ) NAME/KEY: misc_feature

| LOCATION: 29, 40, 139, 211, 3

| OTHER INFORMATION: n = A,T,C

US-10-099-926-890
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      568 TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-099-926-890
   537;
                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                  328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                121
                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
   Matches
                                                                g
                                                                                                         à
                                                                                                                                                                                ò
                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT 147
                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     567
                                                                                                         87
                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                       TITACATITIGCTAAGIGICCTGAICTGCTCATGAAATCCTICTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT
                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                        GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                      Gaps
                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 890, Application US/10033528
| Publication No. US20020131971A1 |
| GENERAL INFORMATION: |
| APPLICANT: King, Gordon E. |
| APPLICANT: Meagher, Madeleine Joy |
| APPLICANT: Weagher, Madeleine Joy |
| APPLICANT: Secrief, Heather |
| TILLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY |
| TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER |
| FILE REPERENCE: 210121.54761 |
| CURRENT APPLICATION NUMBER: US/10/033,528 |
| CURRENT PILING DATE: 2001-12-26 |
| NUMBER OF SEQ ID NOS: 1896 |
| SOFTWARE FRASEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44.8%; Score 537; DB 13; Length 571; 98.7%; Pred. No. 3.3e-148;
Length 571;
                                     7; Indels
Score 537; DB 9; I
Pred. No. 3.3e-148;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:

NAME/KEY: misc_feature

LOCATION: 29, 40, 139, 211, 351, 379,

COTHER INFORMATION: n = A,T,C or G

US-10-033-528-890
Query Match
Best Local Similarity 98.7%;
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 16
US-10-033-528-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 890
                                                                                                                                            61
                                                                                                                                                                                88
                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                    148
                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                           208
                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

g

ò

ò

දු පු

8 엄 8 qq

g

8 6

g

à 8 S

g ò

9

240

g

8 & ठे g Š g

셤 8 ò q 셤

ò g ò

ò

엄

ò 셤

```
Sequence 47618, Application US/10242535A

Publication No. US20040013663A1

GENERAL INFORMATION:
APPLICANT: ChondroGene Inc.
APPLICANT: ChondroGene Inc.
TITLE OF INVENTYON: Compositions and Methods Relatiing to Osteoarthritis
FILER REFERENCE: 4211/2005
CURRENT APPLICATION NUMBER: US/10/242,535A

CURRENT APPLICATION NUMBER: US 10/085,783

PRIOR PILING DATE: 2002-09-12

PRIOR PILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR PILING DATE: 2001-03-28

NUMBER OF SEQ ID NOS: 58994

SOFTWARE: Patentin Version 3.2

LENGTH: 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTTGATTTTCCAAAAATCCA 447
                                                                                                                                                                                                                                      61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGGCAGGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           508 GCGAATITICTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT 567
                                                                                                                                                                                                                                                                                                                          TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                  148 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 207
                                                                                                                                                                           481 GCGAATTTGTGAAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT
                                                                                                                                                  1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                       Gaps
                                                                                                       ö
                                                               Length 571;
                                                                                                     Indela
                                                             44.8%; Score 537; DB 22;
98.7%; Pred. No. 3.3e-148;
tive 0; Mismatches 7;
; OTHER INFORMATION: n = A, T, C or US-10-961-527-890
                                                             Query Match
Best Local Similarity 98.7
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-242-535A-47618/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                         28
                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   568
                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                  ò
                                                                                                                                                                                ď
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                88 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT 147
                                                                                                                                                                                                                                                                                                        GCANATICCTITAAGCGACCCTITIGGGACAACICTIAICAGGGAGGAGCGAACIGCICAII 267
                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   388 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            508 GCGAATTIGTGAAATGTAAAGTTCATGGTTTCCATGGCGTGTTCCATTTGANATGGCTTT 567
                                                                                                                                                                                         TITACATITGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                               448 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 507
                    9
                                                          28 GNAACTAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NESULT 18

US-10-961-527-890

US-10-961-527-890

Sequence 890, Application US/10961527

Publication No. US20050147615A1

GENERAL INFORMATION:

APPLICANT: King, Gordon E.

APPLICANT: Ascrist, Heather Joy

APPLICANT: Secrist, Heather

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER

TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER

FILE REFERENCE: 21012.54764

CURRENT APPLICATION NUMBER: US 09/920,300

PRIOR FILING DATE: 2001-07-31

PRIOR PELING DATE: 2001-07-31

PRIOR PELING DATE: 2001-06-29

PRIOR PELING DATE: 2001-06-29

PRIOR PELING DATE: 2001-06-29

PRIOR PELING DATE: 2001-06-29

PRIOR PELING DATE: 2001-08-38

PRIOR PELING DATE: 2000-08-03

NUMBER OF SEQ 1D NOS: 1789

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: misc_feature
LOCATION: 29, 40, 139, 211, 351, 379, 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [|||
TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 571
                                                                                                     61
                                                                                                                                                                                         121
                                                                                                                                                                                                                                  148
                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                       208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
```

187 356 247 307

```
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-992-600A-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
LENGTH: 2016
                                                        68
                                                                                                                               128
                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                    235
                                                                                                                                                                                                                                                                                                                                                                                                                        368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                      à
                                                                                        g
                                                                                                                             ò
                                                                                                                                                          g
                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 45618, Application US/10085783A

| Publication No. US20040037841A1
| GENERAL INFORMATION:
| APPLICANT: ChondroGene Inc.
| APPLICANT: ChondroGene Inc.
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
| TILLE OF INVENTION: Composition NUMBER: US/10/085, 783A
| PRIOR APPLICATION NUMBER: US 60/275, 017
| PRIOR PILLING DATE: 2001-03-12
| PRIOR PILLING DATE: 2001-03-12
| PRIOR PILLING DATE: 2001-03-12
| PRIOR FILLING DATE: 2001-03-12
| PRIOR FILLING DATE: 2001-03-12
| PRIOR FILLING DATE: 2001-03-12
| WINDER OF SEQ ID NOS: 589994
| NUMBER OF SEQ ID NOS: 589994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                        416
                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAGACCTTTATTTATTGAGGGCAAGGGGATGCAACCAATCCAAAAATCAAAAAGCTTA 476
                                                                                                                                                                                TCTGGTAFTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAATTTTACAT 127
                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                             356
                                                                                                                                                                                                                                                                                                                                 247
                                                                                                                                                                                                                                                                                                                                                  CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAACTGCTCATTTCTGCCT 296
                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACT 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26
                                                                                                                                                                                                                                                                                           Trictraagrerccreatercercarcaartecrreraggggaagerergggecagarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCAGCGAATT
                                                                                                                                                                                                                    rcregrarrraacrrircrircrerecriercaaareagagrragarrrarrraracar
                                                                                                                                                                                                                                                        TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                 CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                   ACTICITICCCTICIGCTICATGIGIACIACAAAAIAGICATIGCAIGCAATGGIGAGGC
                                                                                                             8 AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rergaaareraacarcares-aaccaresecretrecarrreagarescarrres
                                                                           ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٦;
                                   Query Match
43.0%; Score 516; DB 17; Length 538;
Best Local Similarity 98.9%; Pred. No. 5.3e-142;
Matches 530; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 43.0%; Score 516; DB 18; Length 538; Best Local Similarity 98.9%; Pred. No. 5.3e-142; Matches 530; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-085-783A-47618/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-085-783A-47618
 JS-10-242-535A-47618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 47618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM:
                                                                                                                                                                                68
                                                                                                                                                                                                                    475
                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                          415
                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                 355
                                                                                                                                                                                                                                                                                                                                                                                                     248
                                                                                                                                                                                                                                                                                                                                                                                                                                       295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55
                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                           g
                                                                                                                                                                                ò
                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                          9
8
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
296
                                                                                                                                                                                                                                                                                                                                                           236
                                                                                                                                                                                                                                                                                                                                                                                                                      367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                  295 ACTICTITICCCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
475 TCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                              TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                  415 Triccraagrerectearerectearecareaarectreraeeeeeaaeerereeeeaare
                                                                                                                                                                                                                                           355 CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                      248 ACTICITICCCTICIGCTICAIGIGIACIACAAAATAGICAIIGCAIGCAAIGGIGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                      CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTCATTATTTTGTCCACAGGCGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        175 CCTTCATTATTTTGTCCACAGGCAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOS-992-004-1)

Sequence 1, Application US/09992600A

Publication No. US20030027161A1

Sequence 1, Application W. US20030027161A1

SPELICANT: Benjaini, Stephane

APPLICANT: Branaka, Hiroaki

TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 91.044.DIV

CURRENT APPLICATION NUMBER: US/09/992,600A

CURRENT FILING DATE: 2001-01-11-13

PRIOR PLILNG DATE: 2001-08-06

PRIOR PLILNG DATE: 2001-08-06

PRIOR PLILNG DATE: 2001-07-13

PRIOR PLILNG DATE: 2001-07-13

PRIOR PLILNG DATE: 2001-06-06

PRIOR PLING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: US 60/298,698

PRIOR PLING DATE: 2001-06-15

SOFTWARE OF SEQ. ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY: CDS
LOCATION: 1435..1836
FEATURE:
NAME/KEY: 3'UTR
```

```
US-09-992-095B-1/c
                                                                                                                                                                                     US-09-924-340-1
                                                                                                                                                                                                                                                                                                   2012
                                                                                                                                                                                                                                                                                                                                133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1532
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                    2012 TITITITITITICITICCECTGCTGCTGAAAGAGAGATTAGATTTATTTTACATTTGCT 1953
                                                                                                                                                           ö
                                                                                                                                                                                                                                                            1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                 1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1712 ATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTTTTCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                  73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT 132
                                                                                                                                                                                                                                         133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGAGTTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAGGGAAAAGGAGGCCTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           432
                                                                                                                                                                                                                                                                                                   AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                           TCCATGAGTACTCTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTATTTTGCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/09924340

Publication No US20030027248A1

GENERAL INFORMATION:

APPLICANT: Bejanin, Stephane

APPLICANT: Tanaka, Hiroaki

ITILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 91.USZ.REG

CURRENT APPLICATION NUMBER: US/09/924,340

CURRENT APPLICATION NUMBER: US 60/305,456

PRIOR APPLICATION NUMBER: US 60/305,456

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-15

PRIOR APPLICATION NUMBER: US 60/293,574

PRIOR FILING DATE: 2001-06-25

PRIOR APPLICATION NUMBER: US 60/293,574

PRIOR FILING DATE: 2001-05-25

NUMBER OF SEQ ID NOS: 112

SOFTWARE: Datent

SEQ ID NO 1

LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553 GITGAAGCCITGGCCGAGGCGCGGCGACGCTGGGCGAGCTGGCCGAGCT 602
                                                                                                                             Length 2016;
                                                                                                                                                           ö
                                                                                                                            40.5%; Score 485.2; DB 10; Length 94.7%; Pred. No. 1.4e-132; ive 0; Mismatches 28; Indels
                                                                                                                         Query Match 40.5
Best Local Similarity 94.7
Matches 502; Conservative
                         ; NAME/KEY: polyA signal
; LOCATION: 1965..1970
; FEATURE:
; NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-09-992-600A-1
LOCATION: 1837..2016
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 22
US-09-924-340-1/c
                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                             1892
                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1592
                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
```

```
1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1892 AGCGACCCTTTGGGACCACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rccarcacitacitacitacitacitacita de la contra dela contra de la contra della contra de la contra de la contra de la contra de la contra della contra della contra de la contra de la contra de la contra della contra 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1712 ATTATTTGCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCTGGGCGAGCTGGGCCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09992095B
Publication No. US20030157485A1
GENERAL INFORMATION:
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TILE OF INVENTION: HUMAN CONAS AND PROTEINS AND USES THEREOF
TILE REPREBLCE: 91.US5.DIV
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 485.2; DB 10;
Pred. No. 1.4e-132;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.7%;
Matches 502; Conservative
                                                                                                                                                                                                                                                        LOCATION: 1435..1836
NAME/KEY: 3'UTR
LOCATION: 1837..2016
NAME/KEY: polyA_signal
LOCATION: 1965..1970
NAME/KEY: polyA_site
LOCATION: 2001..2016
Homo sapiens
                                                                                                                                                                 ..1434
                                                                                            NAME/KEY: 5'UTR
LOCATION: 1..143
NAME/KEY: CDS
```

```
.832 Tricccriciscricargrafactacaaaaragrafigargcargcaarggraggcccgca 1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTATTTTGTCCACAGGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                    GENERAL INCRMANTION:

GRENERAL INCRMANTION:

APPLICANT: Benjanin, Stephane

APPLICANT: Tanaka, Hiroaki

TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: G091USOBDIV

CURRENT APPLICATION NUMBER: US 09/999,570

CURRENT FILING DATE: 2001-06-14

PRIOR PILING DATE: 2001-08-06

PRIOR PILING DATE: 2001-08-06

PRIOR PILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-15

PRIOR PILING DATE: 2001-06-15

PRIOR PILING DATE: 2001-06-15

PRIOR FILING DATE: 2001-06-15

PRIOR PILING DATE: 2001-05-25

NUMBER OF SEQ ID NO: 112

SOFTWARE: JPACENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
40.5%; Score 485.2; DB 10; Length 2016;
Best Local Similarity 94.7%; Pred: No. 1.4e-132;
Matches 502; Conservative 0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 TATTTAACTTTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: 1435..1836
FEATURE:
NAME/KEY: 3'UTR
LOCATION: 1837..2016
FEATURE:
NAME/KEY: POLYA_Signal
LOCATION: 1965..1970
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: polyA site
; LOCATION: 2001. 2016
US-09-999-570-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 1..1434
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: 5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1652 TCCATGAGTACTCTCAGGTCCTCTTTTGTTAAGTAGCTTTTTTTCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2012 TTTTTTTTTTTTTTTTCTTTCTTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1932 TITCCCITCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1712 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133 AAGTGTCCTGATCTCTTATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73 TATTTAACTTTTCTCTCTGCTTGTCAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40.5%; Score 485.2; DB 10; 94.7%; Pred. No. 1.4e-132;
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR PILING DATE: 2001-06-18
PRIOR FILING DATE: 2001-06-18
PRIOR PILING DATE: 2001-06-18
PRIOR FILING DATE: 2001-06-18
SOFTWARE: JPACENT NUMBER: US 60/293,574
NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPACENT
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 502; Conservative
                                                                                                                                                                                                                                                                                                                            LOCATION: 1..1434
EATURE:
NAME/KEY: CDS
LOCATION: 1435..1836
FEATURE:
NAME/KEY: 3'UTR
LOCATION: 1837..2016
FEATURE:
NAME/KEY: polyA signal
LOCATION: 1965..1970
FEATURE:
                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-09-992-095B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                        5'UTR
1..1434
                                                                                                                                                                                                                  LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
```

셤

ò

a

ò

8 8

8 & 8 8

ö

252

433 TCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCAGGGAATTTGTGA 492

RESULT 24 US-09-999-570-1/c ; Sequence 1, Application US/0999570

8 8 8

d

å &

ò

1653

492

552

```
1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                         1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                  1712 ATTATTTTGCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                   TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGGGAATTTGTGA
                                             1772 ATTAGGGAAAAGAAGCTCTGGAAGCCACTTTGCCATCTCTACACTGGTCCTTC
      313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                              373 ATTATTTTGCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                              493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAITITAACITITICITICICIGCITGICAAATGAGAGITAGATTITIATTITIACATTIGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/1000986;
Publication No. US20030096247A1
GENERAL INFORMATION:
APPLICANT: Benjania, Hiroaki
TILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US9.US. 10.09.014
CURRENT FILING DATE: 2001-11-14
CURRENT FILING DATE: 2001-11-14
FRIOR PAPLICATION NUMBER: US/924,340
FRIOR PLING DATE: 2001-08-06
FRIOR FILING DATE: 2001-08-06
FRIOR PLING DATE: 2001-08-06
FRIOR FILING DATE: 2001-06-29
FRIOR FILING DATE: 2001-06-29
FRIOR FILING DATE: 2001-06-29
FRIOR FILING DATE: 2001-06-29
FRIOR FILING DATE: 2001-06-25
FRIOR PLING DATE: 2001-06-25
FRIOR FILING DATE: 2001-06-26
FRIOR FILING DATE: 2001-06-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40.5%; Score 485.2; DB 14; Length 2016;
llarity 94.7%; Pred. No. 1.4e-132;
Conservative 0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: 5.UTR
LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435..1836
NAME/KEY: 3.UTR
LOCATION: 1837..2016
NAME/KEY: polyA signal
LOCATION: 1965..1970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 1965. 1970
NAME/KEY: polyA site
LOCATION: 2001. 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 502; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-000-986-1
                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                   g
                                                                                                                           8
                                                                                                                                                                        g
                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                              1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1952 AAGTGTCCTGATCTCCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1892 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 TATTTAACTTTTCTTTCTTTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133 AAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTC 252
                                                             493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                            1532 dirdaadccaccagadgcrcagrdcdaggrcrdddcagdcaagaaadggi 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: DENJAILH, OSCENARIO,
APPLICANT: TANARA, HITCARI,
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR FILING DATE: 2001-08-06
PRIOR PELICATION NUMBER: PCT/IB01/01715
PRIOR PELICATION NUMBER: PCT/IB01/01715
PRIOR PLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR PLING DATE: 2001-06-29
PRIOR PLING DATE: 2001-06-15
                                                                                                                                                                                         GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 14; Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 485.2; DB 14;
Pred. No. 1.4e-132;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/10000489
Publication No. US20030092011A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tch 40.5%;
al Similarity 94.7%;
502; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Benjanin, Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435..1836
NAME/KEY: 3'UTR
LOCATION: 1837..2016
NAME/KEY: polyA signal
LOCATION: 1955..1970
NAME/KEY: polyA site
LOCATION: 2001..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 20
US-10-000-489-1
                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                           유
                                                                                                                                                                  ð
                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
```

192

ö

1833

372

432

```
1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                              1772 ATTAGGGAAAGGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 1533
                                                                                                                                                      .652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                              1892 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                        313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373 ATTAITITGCACAGGCCAGAGGGTCTTTTTGCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                              <u> AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 485.2; DB 16; Length 2016;
Pred. No. 1.4e-132;
0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/10001142

Publication No. US20030198954A1

GENERAL INFORMATION:

APPLICANT: Benjanin, Stephane

APPLICANT: Tanaka, Hiroaki

TILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 91.US7.DIV

CURRENT APPLICATION NUMBER: US/10/001,142

CURRENT FILING DATE: 2001-11-14

PRIOR PLILING DATE: 2001-11-14

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR APPLICATION NUMBER: PCT/1B01/01715

PRIOR PLILING DATE: 2001-08-06

PRIOR PLING DATE: 2001-08-06

PRIOR APPLICATION NUMBER: US 60/305,456

PRIOR PLING DATE: 2001-09-13

SOFTWARE: UPBLEDTE 1201-09-13

SEQ ID NO 1

LENGTH:: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTG
                                          Query Match
Best Local Similarity 94.7%;
Matches 502; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE:: DNA
ORGANISM: Homo sapiens
FRATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435.1836
NAME/KEY: 3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-001-142-1/c
  US-10-154-678-1
                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                    193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    253
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ⋧
                                                                                                                                                                                                                                      1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTC 1533
                                                                                                                                                    1832 TITCCCTICTGCTICCATGTGTACTACAAAAIAGTCATTGCATGCATGGAGGGCCCGCA 1773
1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          552
                                            AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                    ATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                                                                                      TCCATGAGTACTCTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                              AATGTAAACATCGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                 1892 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAACGGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/10154678

Publication No. US20030162186A1

GENERAL INFORMATION:

APPLICANT: Benjanin, Stephane

APPLICANT: Tanaka, Hiroaki

ITILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 182.US/182

CURRENT PILING DATE: 2002-10-15

FRIOR FILING DATE: 2001-08-06

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-06-15

PRIOR FILING DATE: 2001-05-15

PRIOR FILING DATE: 2001-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553 GTTGAAGCCTTGGCCGAGGCGCGCGCGCACCTGGGCCAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polyA_signal
1965..1970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
1435..1836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1837..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_site
2001..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5'UTR
1..1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 27
US-10-154-678-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION:
FEATURE:
                                          193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY:
LOCATION:
                                                                                                                              253
                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION:
                                                                                                                                                                                              2 d 2 d
                                                                           8 6 8
                                                                                                                                                                                                                                                                                                                                                                      장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                          B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 6
                                       ò
```

1593

```
AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTGC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-242-535A-46392/C
; Sequence 46392, Application US/10242535A
; Publication No. US20040013663A1
; GENERAL INFORMATION:
; APPLICANT: ChondroGene Inc.
; APPLICANT: Liew, C.C.
; TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis
; FILE REFERENCE: 4231/2005
; CURRENT APPLICATION NUMBER: US/10/242,535A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2012 TTTTTTTTTTTTTTCTTTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTAGATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGTGTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTATTTTGCACAGAGGGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATITIAACTITICITICICTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indela
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 485.2; DB 21;
Pred. No. 1.4e-132;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 94.7%;
Matches 502; Conservative
                                                                                                                                                                     ORGANISM: Homo sapiens
     SOFTWARE: JPatent SEQ ID NO 1 LENGTH: 2016
                                                                                                                                         LOCATION: 1..1434
FEATURE:
                                                                                                                     NAME/KEY: 5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                            1892 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2012 TTTTTTTTTTTTTCTTTCCTTGCTTGTCAAATGAGAGTTAGATTTTAATTTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1832 Trrcccrrcrccrrcargracracaaaragrcarrccargcaarggraaggcccgca 1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                            1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                         133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                    AGCGACCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTAGGGAAAAGACTCTGGAAGCCCACTTTGCCATCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                              TITCCCTICTGCTTCATGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 373 ATTAITITGICCACAGCCAGAGGTCTITITGAITITCCAAAAAICCCAGGGAACTCCTIT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTCC 552
                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Benjanin, Stephane
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFRENCE: 91.065.DIV
CURRENT APPLICATION NUMBER: US/10/838,854
CURRENT FILING DATE: 2004-05-03
PRIOR APPLICATION NUMBER: US/30/000,489
PRIOR APPLICATION NUMBER: US/30/000,489
PRIOR PILING DATE: 2001-11-14
PRIOR FILING DATE: 2001-01-06-06
PRIOR PELING DATE: 2001-01-06-06
PRIOR APPLICATION NUMBER: PCT/1B01/01715
PRIOR PILING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-06
PRIOR PLING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-29
PRIOR PLING DATE: 2001-06-25
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR PLING DATE: 2001-06-25
PRIOR PELING DATE: 2001-06-25
PRIOR PELING DATE: 2001-06-25
PRIOR PELING DATE: 2001-06-25
NUMBER OF SEQ ID NOS: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTGAAGCCTTGGCCGAGGCGCGCGCGCCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                       Length 2016;
                                                                                                                                                             ö
                                                                                                                                                         Indels
                                                                                                                       DB 16;
                                                                                                                   40.5%; Score 485.2; DB 16
llarity 94.7%; Pred. No. 1.4e-132;
Conservative 0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/10838854
Publication No. US20050026182A1
GENERAL INFORMATION:
; NAME/KEY: polyA_signal
; LOCATION: 1965..1970
; NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-10-001.142-1
                                                                                                                                   Best Local Similarity
Matches 502; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-838-854-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                    193
                                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1532
                                                                                                                     Query Match
                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                            S
C
                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

Gaps

ô

192

252

312

1713

432

492

```
tch 39.3%; al Similarity 99.2%; 474; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 38.5%;
Best Local Similarity 98.7%;
Matches 465; Conservative
                                                                                                              Query Match
Best Local Similarity
Matches 474; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-242-535A-57930/c
                                    ; TYPE: DNA
; ORGANISM: Human
US-10-085-783A-46392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-242-535A-57930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 57930
SEQ ID NO 46392
                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                   LENGTH:
                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACATITGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITACATTIGCTAAGIGICCTGATCTGCTCATGAAAICCTICTAIGGGGGAAGCTGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAACCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGACTCTGGAAGCCCACTTTGCCATCTCTACACTGG 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Chondrodene Inc.
APPLICANT: Chondrodene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
CURRENT APPLICATION NUMBER: US 60/305,340
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR PILING DATE: 2001-07-13
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-13
PRIOR FILING DATE: 2001-03-13
PRIOR FILING DATE: 2001-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC 1
                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                   Length 482;
                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                   DB 17;
                                                                                                                                                                                                                                                                                                                 Score 471.6; DB 17
Pred. No. 7.3e-129;
0; Mismatches 4;
             PRIOR FILING DATE: 2002-02-28

PRIOR FILING DATE: 2002-02-28

PRIOR FILING DATE: 2002-02-28

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-02-28

NUMBER OF SEQ ID NOS: 58994

SOSTWARE: PATCHTIN VETSION 3.2

SEQ ID NO 46392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-085-783A-46392/c; Sequence 46392, Application US/10085783A; Publication No. US20040037841A1; GENERAL INFORMATION:
   2002-09-12
                                                                                                                                                                                                                                                                                                                   39.3%;
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 474; Conserv
 CURRENT FILING DATE:
                                                                                                                                                                                                                                                             ; ORGANISM: Human
US-10-242-535A-46392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         118
                                                                                                                                                                                                                                              TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
```

g

ò 8 B

d

qq ò g 8 g

8

g 8 g ò

```
Sequence 57930, Application US/10242535A
; Publication No. US20040013663A1
; GENREAL INFORMATION:
; APPLICANT: ChondroGene Inc.;
; APPLICANT: Liew, C.C.
; TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis
; FILE REFERENCE: 4231/2005
; CURRENT APLICATION NUMBER: US/10/242,535A
; CURRENT FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: US 10/085,783
; PRIOR APPLICATION NUMBER: US 60/305,340
; PRIOR FILING DATE: 2001-07-13
; PRIOR FILING DATE: 2001-03-12
; PRIOR PRILING DATE: 2001-03-28
; NUMBER OF SEQ ID NOS: 58994
; NUMBER OF SEQ ID NOS: 58994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                           ö
                                                                                                                                                                        419
                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                     359
                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                      299
                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGCCTACTTCCTTTCCCCTTCTGCTACTACAAATAGTCATTGCATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTAACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Greadecececaarradegaaaagareeregaageeeacrrrreecarereracaereg 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            118 rccaggrccrrcarrarrrrgrccacagaccagaggrcrrrrrgarrrccaaaaarcca 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478
                                                                                                                                                                                                                                                                                                                                                                           358 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                        478 GAACTTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGGTGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                        418 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              58 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC 1
                                                                                                                   1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 461.4; DB 17; Length 472;
Pred. No. 7.6e-126;
0; Mismatches 6; Indels 0;
  DB 18; Length 482;
                                                           Indels
                                                              4;
Score 471.6; DB 18
Pred. No. 7.3e-129;
0; Mismatches 4;
```

372 233

g

a

ેં

g ò g

ઠે

요 장

ઠે

셤

q

ð

ઠે

```
## Sequence 4912.

| Sequence 4912. | Application US/10242535A |
| Sequence 4912. | Application No. US20040013663A1 |
| GENERAL INFORMATION: US20040013663A1 |
| GENERAL INFORMATION: US20040013663A1 |
| APPLICANT: ChordroGene Inc. |
| FILE REFRENCE: 4231.2055 |
| PRIOR PELING DATE: 2002-02-03-12 |
| PRIOR APPLICATION NUMBER: US 60/305,340 |
| PRIOR FILING DATE: 2001-01-13 |
| PRIOR PELING DATE: 2001-01-03-12 |
| PRIOR PELING DATE: 2001-03-12 |
| PRIOR FILING DATE: 2001-03-12 |
| PRIOR FILING DATE: 2001-03-28 |
| NUMBER OF SEQ ID NOS: 58994 |
| SEQ ID NO 49122 |
| LENGTH: 480
                                                                                                                                                     232 ATTAGGGAAAAGACCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 173
                                                                                                                                                                                                                     373 ATTAITITGICCACAGCCCAGAGGCTCTTTTGATTTTCCAAAAAICCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                            GTTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 113
352 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 293
                                                                                                                                                                                                                                                                                                          TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATTCCTTAAGCCGACCCTTTGGGCAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 241
                                                                                                                                                                                                                                                                                                                                 313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 AACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420 GCTTATCTGGTATTTAACTTTTCTTTCCTCTGCTTGCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                          AATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGAGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 37.4%; Score 448; DB 17;
Best Local Similarity 95.8%; Pred. No. 7.2e-122;
Matches 460; Conservative 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human
US-10-242-535A-49122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                           253
                                                                                                                                                                                                                                                            172
                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                   112
                                                                                                                                                                                                                                                                                                                                                                                                                                          52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                             õ
                                                                         ద
                                                                                                                8
                                                                                                                                                            용
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 57930, Application US/10085783A; Bublication No. US20040037841A1; Sequence 57930, Application No. US20040037841A1; GENERAL INFORMATION:
; GENERAL INFORMATION:
; APPLICANT: Chondrodene Inc.; APPLICANT: Chondrodene Inc.; APPLICANT: Chondrodene Inc.; APPLICANT: Ocompositions and Methods Relating to Osteoarthritis FILER REFERENCE: 4231/2002
; CURRENT APPLICATION NUMBER: US/10/085,783A; CURRENT FILING DATE: 2002-02-28; PRIOR PLILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: US 60/275,017
; PRIOR FILING DATE: 2001-02-28; NUMBER OF SEQ ID NOS: 58994
; SOFTWARE: PatentIn version 3.2
; SEQ ID NOS: 58994
; SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                   373 ATTATTITIGICCACAGCCAGAGGGICTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                         AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                              TITCCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                        ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                 GTATTTTGTCCACAGCCAGAGGTCTTTTGATTTTCCAAAAATCCAGGAACTCCTTT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                       AAGTGTCCTGATCTCCTCATGAAATCCTTCTATGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                              412 AAGTGTCCTGATCTCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATITIAACTITITICITICCTIGCTIGAAATGAGAGTTAGATTITITATTITIACATTIGCT 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133 AAGTGTCCTGATCTCTCTTCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGAGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 461.4; DB 18;
Pred. No. 7.6e-126;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38.5%;
98.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 465; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-085-783A-57930/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-085-783A-57930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 472
                                                                                                                                                                                         193
                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                     133
                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    412
```

122

421

361

182

301

유 ઠે 셤 ò

242

```
Sequence 56036, Application US/10242535A
; Bublication No. US20040013663A1
; Bublication No. US20040013663A1
; GENERAL INFORMATION:
; APPLICANT: ChondroGene Inc.
; APPLICANT: ChondroGene Inc.
; APPLICANT: ChondroGene Inc.
; TITLE OF INVENTYON: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2005.
; CURRENT APPLICATION NUMBER: US/10/242,535A
; CURRENT FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: US 60/305,340
; PRIOR PILING DATE: 2001-07-12
; PRIOR PILING DATE: 2001-07-12
; PRIOR PILING DATE: 2001-07-13
; PRIOR FILING DATE: 2001-03-12
; PRIOR FILING DATE: 2001-03-12
; RIUGH APPLICATION NUMBER: US 60/275,017
; PRIOR APPLICATION NUMBER: US 60/271,955
; RIUGH APPLICATION NUMBER: US 60/271,955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               414 TCTGGTATTTTAACTTTTTTTTTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACAT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248 ACTICITICCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCATGCTAATGGTGAGGC 307
60 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTTCCCCAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTICITICCTITCCGTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       174 CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              474 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACNACCNCAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTAACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTTTTCCATGAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTTTCCATGAGTACTCTCAGGTCCTTCCTTTGTTAAGTAGCTTTTTTCCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 37.2%; Score 446.4; DB 17; Length 474; Best Local Similarity 98.9%; Pred. No. 2.1e-121; Matches 469; Conservative 0; Mismatches 3; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-242-535A-56036/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Human
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REPERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
CURRENT FILING DATE: 2002-02-28
FRIOR PAPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-03-12
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR APPLICATION NUMBER: US 60/271,955
PRIOR APPLICATION NUMBER: 2001-03-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: PatentIn version 3.2
LENGTH: 480
                                                                                              422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480 ACCTAAAAAAGACCTITATITATITGAGGGCAAGGGGATGCAACCAATCCAAAAATCAAAA 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                       GAGGCCCGCAATTAGGGAAAACAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 121
                                                                                                                                                                          GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGICCTICATIAITITGICCACAGCCAGAGGGICTITITGATITICCAAAAAICCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGCCCGCAATTAGGGAAAACAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 121
                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cassicerrearrarringicacassecasses en cassicarringarringarara
                                                                                                                                                                                                             н
                                                                                                                  CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTTTTCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 AACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 448; DB 18;
Pred. No. 7.2e-122;
0; Mismatches 20;
                                                                                              CAGGICCITCALTALTIGICCACAGCCAGAGGGICTI
                                                                                                                                                                                                                                                                                                             ; Sequence 49122, Application US/10085783A; Publication No. US20040037841A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37.4%;
95.8%;
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: ChondroGene Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 460; Conserv
                                                                                                                                                                                                                                                                        RESULT 35
US-10-085-783A-49122/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-085-783A-49122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                       180
                                                                                              363
                                                                                                                                   120
                                                                                                                                                                          423
                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                               g
                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8 8
```

.. 7

415

127

295 247 175

115

427 55

```
US-10-242-535A-56504
                                                                                                                                                                                                                                                                                                                                          ORGANISM: Human
                                                                                                                                                                                                                                                                                            SEQ ID NO 56504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28
                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                            APELICANT: Likew, C.C.

TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REPERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
CURRENT PILING DATE: 2002-02-28
FRIOR APPLICATION NUMBER: US 60/305,340
FRIOR APPLICATION NUMBER: US 60/275,017
FRIOR FILING DATE: 2001-02-28
FRIOR FILING DATE: 2001-02-28
SOFTWARE: PATENTION OF S8994
SOFTWARE: PATENTION OF S8994
SOFTWARE: ALTHOR DATE: 2001-02-28
SEQ ID NO 56036
LENGTH: 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcrédiatriraActririciriricidecridicaaardaGagiraGarririaririadar 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTICITICCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGGGGGC 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTGGTATTTAACTTTTCTTTTCTCTCTGCTTGTCAAATGAGGTTAGATTTTATTTTTACAT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGCTAAGIGICCIGAICTIGCICAIGAAAICCIICTAIGGGGGAAGCIGIGGGGCAGAIT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             354 TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCT 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9 AAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTICITICCCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 CCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTTTCCATGAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTTTCCATGAGTACTCTCAGGTCCTTCCTTTGTTAAGTAGCCTTTATCCCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    37.2%; Score 446.4; DB 18; Length 474; 98.9%; Pred. No. 2.1e-121; ive 0; Mismatches 3; Indels 2;
               Sequence 56036, Application US/10085783A Publication No. US20040037841A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ຫ້
                                                                                                                                                                                                                                                                                                                                                                                                                                   ġ,
                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: misc feature
LOCATION: (436)...(436)
OTHER INFORMATION: n is a, c,
US-10-085-783A-56036
                                                                                                                                                                                                                                                                                                                                                                                                                                    υ
                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY: misc feature
LOCATION: (432)
OTHER INFORMATION: n is a,
                                                                 APPLICANT: Chondrogene Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    al Similarity 98.5
469; Conservative
US-10-085-783A-56036/c
                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54
                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
APPLICANT: ChondroGene Inc.
APPLICANT: ChondroGene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis
FILE REPERBYCE: 4231/2005
CURRENT APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: US 0/085,783
PRIOR PILING DATE: 2001-03-28
PRIOR PILING DATE: 2001-07-13
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388 AAAGCTTATCTGGTATTTAACTTTTCTTCTCTGCTTGTCAAATGAGAGTTAGATTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180 GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268 GGCAGATICCTIAAGCGACCCTIIGGGACAACICTIATCAGGGAGGAGGAGCGAACIGCTCAI 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328 TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88 GTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAAACC 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Chondrogene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis FILE REFERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCTAAATGAGAGTTAGATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 17; Length 448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 434.4; DB 17
Pred. No. 7.5e-118;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     447
Sequence 56504, Application US/10242535A Publication No. US20040013663A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Sequence 56504, Application US/10085783A; Publication No. US20040037841A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.6%;
Matches 446; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-085-783A-56504/c
```

ö

; 0

151 418 211 358 298 331 238 391

> g ò 원 장 ద ò

451 118 511

```
466 CATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAG 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237 GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92 TGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCTGATCTGCTCA
                                                                                                                                                                                                                                                 477 recrigicaaargagagiragaririrarririacarirgcraagigiccrgarcrgcrca
                                                                                                                                                                                                                                                                                                 152 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAAC
                                                                                                                                                                                                                                                                                                                                                  417 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  357 TCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCCTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 332 GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             452 CCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       125 CATITIGCTAAGIGICCTGAICTCGCTCAIGAAAICCTICIAIGGGGAAGCIGIGGGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                     212 TCTTATCAGGGAGGGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         272 GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  392 GAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 10; Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATI'S HYSEQ, INC.
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
TITLE REFERENCE: 20411-756
CURRENT APPLICATION NUMBER: US/09/918,995
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR FILING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: FASISEQ for Windows Version 3.0
                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 35.2%; Score 422; DB 10; L Best Local Similarity 100.0%; Pred. No. 3.6e-114; Matches 422; Conservative 0; Mismatches 0;
                                                                                                Query Match 35.8%; Score 429.4; DB 10
Best Local Similarity 99.8%; Pred. No. 2.3e-116;
Matches 430; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 12556, Application US/09918995; Publication No. US20030073623A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LOCATION: (1)...(466); OTHER INFORMATION: n = A,T,C or G US-09-918-995-12556

    LOCATION: (1) ... (477)
    CTHER INFORMATION: n = A, T, C or G
US-09-918-995-21508

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                512 CCATGGCGTGT 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57 ccardecercr 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 41
US-09-918-995-12556/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \overset{\diamond}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGCITATCTGGTATTTAACTTTTCTTTCTGCGTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rrcreccracrrcrrrrcccrrcrecrrcrargraracracaaaragrcarrecargcaar 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGAGGCCCGCAATTAGGGAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGGCTTGTCAAATGAGAGTTAGATTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                              Length 448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21500, Application US/09918995
; Publication No. US20030073623A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc.
; TITLE OF INVENTION: PROM VARIOUS CDNA LIBRARIES
; TITLE REFERENCE: 20411-756
; CURRENT APPLICATION NUMBER: US/09/918,995
; CURRENT FILIAG DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: US/09/235,076
; RIGH RELIGH DATE: 1999-01-20
; NUMBER OF SEQ ID NOS: 38054
; SOFTWARE: PastSEQ for Windows Version 3.0
; SEQ ID NO 21508
                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                              DB 18;
                                                                                                                                                                                                                                                                                                                                                                           Score 434.4; DB 18
Pred. No. 7.5e-118;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120 AGGGAACTCCTTTTCCATGAGTACTCTC 447
CURRENT FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin Version 3.2
LENGTH: 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGGAACTCCTTTTCCATGAGTACTCTC 1
                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.6%;
Matches 446; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE: NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 40
US-09-918-995-21508/c
                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-10-085-783A-56504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88
```

9 & 9 9

8 8

ò Db à 184

0; Gaps

쉽 ò g δ g δ 셤 ò 요 8

```
RESULT 43
US-10-106-698-2418/C
is Sequence 2418, Application US/10106698
is Publication No. US2030109690A1
is General Information US-10109690A1
is GENERAL INFORMATION: Colon and Colon Cancer Associated Polymucleotides and Polypeptide
is TITLE OF INVENTION: Colon and Colon Cancer Associated Polymucleotides and Polypeptide
is TILE REFERENCE: PA005p1
is CURRENT FILING DATE: 2002-03-27
is PRIOR FILING DATE: 2000-09-28
is PRIOR FILING DATE: 1999-09-29
is PRIOR APPLICATION NUMBER: US 60/157,137
is PRIOR APPLICATION NUMBER: US 60/153,280
is PRIOR APPLICATION NUMBER: US 60/153,280
is PRIOR APPLICATION NUMBER: US 60/163,280
is PRIOR APPLICATION NUMBER: US 60/163,280
is PRIOR APPLICATION NUMBER: DESCRIPTION STATE PARENTING DATE: 1999-11-03
is SEQ ID NO 2418
is LENGTH: 632
                                                             178 rereceraerretrecerrerecercarereracracaaarracrecarrecaare 119
                                                                                                                                  301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                          361 TCCAGGTCCTTCATTATTTGTCCACAGCCCAGAGGGTCTTTTGATTTTCC 411
                                                                                                                                                                                                                                                                                                                TCCAGGICCTTCATTATTTTGICCACAGGCCAGAGGGTCTTTTTGATTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COTHER INFORMATION: n equals a,t,g, or c CTHER INFORMATION: n equals a,t,g, or c LOCATION: (24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(24)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(34)...(37)...(337)...(337)...(337)...(337)...(337)...(337)...(337)...(337)...(337)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(3737)...(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (348). (348)

OTHER INFORMATION: n equals a,t,g, or c NAME/KEY: misc feature
LOCATION: (355). (355)

OTHER INFORMATION: n equals a,t,g, or c NAME/KEY: misc feature
LOCATION: (359). (359)

OTHER INFORMATION: n equals a,t,g, or c OTHER INFORMATION: n equals a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (380)
COTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc feature
LOCATION: (463)...(463)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
LOCATION: (365)..(366)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
LOCATION: (369)..(369)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: (340)...(340)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (348)...(348)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                             28
241
                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                         요
                                                  g
                                                                                                                ∂
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                226 GGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                166 ACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGGGA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        418 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     358 AAGCTTATCTGGTATTTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA 364
                                                                                                                                                                                                                                                                                                                GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA 227
                                                                                                                                                                                                                                                                                                                                                                                                                     GGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGA 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  485 ATTIGIGAAAIGTAAACAICAIGGITICCAIGGCGIGIICCAITIGAGAIGGCAITIIGG 544
                                                                                                                                      CCTACTICITICCCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGA 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: ROSen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PA003P1;
CURRENT APPLICATION NUMBER: US/09/997,003

CURRENT FILING DATE: 2001-11-30

PRIOR APPLICATION NUMBER: Usassigned
PRIOR PILING DATE: 2001-11-30

PRIOR PILING DATE: 2001-11-30

PRIOR PILING DATE: 1200-08-11

PRIOR APPLICATION NUMBER: PCT/US00/22157

PRIOR PILING DATE: 1999-08-13

PRIOR FILING DATE: 1999-08-13

NUMBER OF SEQ ID NOS: 56

SEQ ID NO 26

LENGTH: 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 10; Length 441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 34.3%; Score 411; DB 10; L
Best Local Similarity 100.0%; Pred. No. 6.4e-111;
Matches 411; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-997-003-26/c; Sequence 26, Application US/09997003; Publication No. US20030203361A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TG 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: 1101
US-09-997-003-26
                                                                                                                                  245
                                                                                                                                                                                                                                                                            305
                                                                                                                                                                                                                                                                                                                                                 286
                                                                                                                                                                                                                                                                                                                                                                                                                  365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46
```

8

ઠે

g ઠે g ઠ

ò

셤

ò

```
JUSTICATION NUMBER: US 60/271,955

PUBLICATION NO. US20040037841A1

GENERAL INFORMATION:

APPLICANT: Chondrodene Inc.

APPLICANT: Chondrodene Inc.

TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis

FILE REFERENCE: 4201-202

CURRENT APPLICATION NUMBER: US 60/305,783A

CURRENT FILING DATE: 2002-02-28

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR PRILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-28

NUMBER OF SEQ ID NOS: 58994

SOFTWARE: PARENTING DATE: 2001-02-28

NUMBER OF SEQ ID NOS: 58994

SOFTWARE: PARENTING DATE: 2001-03-28

NUMBER: OF SEQ ID NOS: 58994

SOFTWARE: PARENTING DATE: 2001-03-28

NUMBER: OF SEQ ID NOS: 58994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  391 GAAACTAAAAAAGAACTTTATTGAGGGCAAGGGGATGCAAACAATAAAATCAA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGT-GG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                211 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTCGG 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 32
                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           331 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240 ITCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCAAT
                                                                                                                                                                                                                                                     DB 17; Length 392;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 377.4; DB 18; Length 392;
Pred. No. 5.5e-101;
0; Mismatches 1; Indels 1;
                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                   Score 377.4; DB 17;
Pred. No. 5.5e-101;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360 GICCAGGICCTICATIATITIGICCACAGCC 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60/271,955
    PRIOR FILING DATE: 2001-03-12
PRIOR APPLICATION NUMBER: US 60/
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin version 3.2
SEQ ID NO 45565
LENGTH: 392
                                                                                                                                                                                                                                                     31.5%;
99.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.5%;
Matches 389; Conservative
                                                                                                                                                                                                                                                                                                 Matches 389; Conservative
                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 45
US-10-085-783A-45565/c
                                                                                                                                                                                                          US-10-242-535A-45565
                                                                                                                                                                                   ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31
                                                                                                                                                                                                                                                          Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       452 AAGCTTATCTGGTATTTAACTTTTTTTTTTTTTTTTTT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITACATTIGCINAAGIGCCCGUITNNGGICCNIAANICCITINIAIGGGGNAANCIGT 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272 ATTICTGCCTACTICTTTCCCTICTGCTTCATGIGIACTACAAAAAAGTCATTGCATGCA 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCT-AAGTGTCCTGAT--CTGCTCATGAAATCCTTCTATGGGGGAAGCTGT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    512 GGAACTAAAAAAGAACTTTATTTTTGAGGGCAAGGGGATGCAACCAATNCAAAAATCAA 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212 Argergagecededarragegaaaagaagererggaagecearerreeae 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       152 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 45565, Application US/10242535A
Publication No. US20040013663A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chondrogene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2005
CURRENT APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: US 10/085,783
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2001-07-23
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR APPLICATION NUMBER: US 60/275,017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAACTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 396.2; DB 15; Length
Pred. No. 1.9e-106;
0; Mismatches 16; Indels
                                                       or
                                                                                                                                                                                       or
                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                        or
) NAME/KEY: misc feature
) LOCATION: (519)
) OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
) COCATION: (577)...(577)
) OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
LOCATION: (584)...(584)
) OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
) LOCATION: (593)...(593)
) OTHER INFORMATION: nequals a,t,g, or
) LOCATION: (595)...(595)
) OTHER INFORMATION: nequals a,t,g, or
) LOCATION: (621)...(621)
) OTHER INFORMATION: nequals a,t,g, or
) LOCATION: (621)...(621)
) OTHER INFORMATION: nequals a,t,g, or
US-10-106-698-2418
                                                                                                                     or
                                                                                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGGGAACTCCTTTTCCATGAG 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccasssadriccririticcarsas 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                      33.0%;
95.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 95.7
Matches 424; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 44
US-10-242-535A-45565/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

239

Gaps

,

299

ï

Gaps

٦;

Search completed: August 18, 2005, 03:47:45 Job time : 804 secs This Page Blank (uspto)

	Ltd.
n 5.1.6	Compugen
rersic	- 2005
GenCore	(c) 1993
	Copyright

w model
ŝ
using
search,
nucleic
•
nucleic
ĕ

Run on:

August 17, 2005, 22:33:12; Search time 5198 Seconds (without alignments) 11176.953 Million cell updates/sec

US-10-735-577-16 1199 1 ggaactaaaaaagaacttta......cgggcttcccgccccaccgg 1199 Title: Perfect score: Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 1.0

4708233 segs, 24227607955 residues

Searched:

9416466 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

gb_htg.,
gb_lntg.,
gb_ov.,
gb_ov.,
gb_bt.,
gb_pt.,
gb_rc.,
gb_rc.,
gb_rc.,
gb_rc., GenEmbl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARİES

		a 6				
Result No.	Score	Query Match	Duery Watch Length DB	DB	ID	Description
	640 8	53.4	185447	σ	AI.450992	AI.450992 Human DNA
, ,	9.0	7 7 7	42.0	v	70715898	20715898 Seminar
، ه ر	0 0	9 6	0 0		200000000000000000000000000000000000000	
m U	637.8	53.2	673	D.	BC015973	BC015973 HOMO Sapı
Ω	601	50.1	649	9	CQ878718	CQ878718 Sequence
n S	601	50.1	649	9	AR489221	AR489221 Sequence
y	601	50.1	649	9	AX409703	AX409703 Sequence
C 7	601	50.1	649	9	AX710164	AX710164 Sequence
ထ	601	50.1	649	9	AX779835	AX779835 Sequence
0	601	50.1	649	σ	HUMCLANNII	M38591 Homo sapien
c 10	598	49.9	609	σ	HUMCALPAIL	M81457 Human calpa
c 11	557	46.5	579	φ	AR489209	AR489209 Sequence
12	537	44.8	571	9	AX396675	AX396675 Sequence
c 13	530	44.2	646	σ	AY179865	AY179865 Macaca mu
c 14	523	43.6	582	9	AX899035	AX899035 Sequence
c 15	523	43.6	582	9	BD034568	BD034568 Sequence
c 16	516	43.0	538	9	CQ702692	CQ702692 Sequence
c 17	485.2	40.5	2016	9	AX616317	AX616317 Sequence
c 18	471.6	39.3	482	9	CQ701466	CQ701466 Sequence
c 19	461.4	38.5	472	9	CQ713004	CQ713004 Sequence

CQ704196 Sequence CQ711110 Sequence CQ711578 Sequence MI6464 Bovine calp AX77786 Sequence	M77483 Human p11 p CQ700639 Sequence AB098817 Bos tauru CQ709131 Sequence RC055044 Mis missci	CO706246 Sequence AX306168 Sequence M16465 Mouse calpa CQ711127 Sequence CQ671113 Sequence	ACUOSSZI NOGUO SEPTION OF ACUOND SEPTION OF ACUOND OF AC	AX710160 Sequence J03627 Rat S-100 r AR489208 Sequence AX260435 Sequence
CQ704196 CQ711110 CQ711578 BOVCALPI AX777886	HUMP11A CQ700639 AB098817 CQ709131 BC025044	CO706246 AX306168 MUSCALPI CQ711127	ACUSSI CQ711784 BD251901 AR202142 AR473726 AX407293 AX407293	AX710160 RATS100RP AR489208 AX260435
00040	00405	9099099		6 6 6
480 474 448 604 434	3392 334 334 44 44	365 600 600 339	600 600 600 600 600 600 673	573 573 570 318
40000	32.5	228.7 228.7 228.7 228.7	, 722 , 722 , 727 , 727	27.5 27.5 27.4 26.4
33 3 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	32.	000000000000000000000000000000000000000	22.72	27 27 27 26
446 446.4 434.4 434 423	389.2 377.4 374.2 363.6	33 443 6 34 443 6 33 43 3.6 34 34 36 34 34 36	320.8 320.8 320.8 320.8	329.2 329.2 328.4 317
222 223 233 24	25 27 28 28	1 2 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 8 8 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9	4 4 4 4 2 6 4 4 0
00000	00 00	υυυυυ	υυυυυυ	σοσο

ALIGNMENTS

N

```
DB 6; Le
1.5e-125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
                                                                                                                                   638 bp DNA Sequence 1832 from Patent WO02068579. CQ715898.1 GI:42276755
                                                                                                                                                                                                                                                                                                                        thereof
Patent: WO 02068579-A 1832 06-SEP-2002;
PE Corporation (NY) (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 53.2%; Score 638; DB Best Local Similarity 100.0%; Pred. No. 1.5 Matches 638; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                            1. .638
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                  Corporation (NY) (US)
Location/Qualifiers
                                                                                                                                                                                                        .
Homo sapiens (human)
                                                                      155369 ¢¢¢¢¢¢¢¢ 155376
                                                                                                                                                                                                                          Homo sapiens
                                            1192 CCCACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                              RESULT 2
CQ715898/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9. dg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₹
                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              154948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 155068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155069 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTA 155128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          154768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                155008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAAC 155188
of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm
VECTOR: pBA623.6
This sequence is the entire insert of clone RP11-139D23 The true left end of clone RP11-353M1 is at 85124 in this sequence. The true right end of clone RP11-353M1 is at 22235 in this sequence.
                                                                                                                                                                                                                                                                 reads from a
PCR. Restriction
                                                                                                                                                                                                                                                                                                                   /note="Single clone region. Sequence from reads from a short insert library derived from a clone PCR. Restriction digest data confirm the assembly."
                                                                                                                                                                                                             reads from a
PCR. Restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1132 GGGTCTCGGCGGCCTGCGCCAGTGGAGGGCGGCACCTCCCCAGAAGCCGGGCTTCCCGC 1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                771
                                                                                                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGTGGAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGGCGCGTGGGCCGGAGCTCACCTTGGCCGAGGCGCGGAGAGCGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGGGCGCGCGCCCACGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGTGCGCGGGGGGTAGAGGGGGGGCGCGGGAGCGGGAGGAGCTGGCCGGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTGCCCCCGACTCCCCGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCTCTGCGGCCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGTGGAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGCATTTTGGTGTGCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCAGGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTGTTCCTGCCCCCGACTCCCCCGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCCGCCTCGCAGGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                         53.4%; Score 640.8; DB 9; Length 185447; llarity 97.5%; Pred. No. 7.3e-126; Conservative 0; Mismatches 17; Indels 0; (
                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                                  /clone="RP11-139D23"
/clone_lib="RPCI-11.1"
                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Sim
Matches 651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               154769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  892
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     154829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            154889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     155009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                155129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       155189
                                                                                                  source
                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                            Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W.
Kits, such as nucleic acid arrays, comprising a majority of
humanexons or transcripts, for detecting expression and other uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            578 AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         518 TTTACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                458 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      338 GTGAGGCCCGCAATTAGGGAAAGAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               278 TCCAGGTCCTTCATTATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 218 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 638 GGAACTAAAAAAGGAACTTTATTTATTGAGGGCAAGGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 638;
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
```

Вb

ò

q

ઠે

```
/product="S100 calcium-binding protein A10"

protein id="AAH15973.1"

db xref="G1:46359018"

/db_xref="LocusID:6281"

/db_xref="Mim:114088"

/tabslation="MPSQMEHAMETMMFTEHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATICCTIAAGCGACCCTIIGGGACAACICTIAICAGGGAGGAGGGAACIGCICAIT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGAGGCCCGCAATIAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     341 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281 rccaggrccrrcarrarrarrarccacagccagaggrcrrrrrgarrrrccaaaaarcca 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  641 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541 TIGGIGIGGCCCTIGAAGCCTIGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461 GCAGATTCCTTAAGCGACCCTTTGGGAACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                               GP11, Ca[1], p10, 42C, CAL1L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGGGGAGAGGCGAGCGCGGGGGCTGTGCGC 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue type="Brain, glioblastoma"
/clone lib="NIH MGC_57"
/lab host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 637.8; DB 9;
Pred. No. 1.7e-125;
0; Mismatches 2;
                                                                                                             /gene="S100A10"
/note="Synonyms: ANXZL, Gl
ANXZLG, CLP11, P11"
/db xref="LocueID:6281"
/db xref="MIM:114085"
103 396
/gene="S100A10"
/codon_start=1
                                                                  /note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53.2%;
ilarity 99.7%;
Conservative
                                                                                                   .673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 639; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CQ878718/c
                                                                                                   gene
                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        L Lubases I to 8/3.

Strausberg R.L. Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetcow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapletcn, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Schetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmuz, J., Myers, R.M.,
Butterfield, Y.S., Krzywinski, M. I., Skalska, U., Smailus, D.E.,
Generch, A., Schein, J.E., Jones, S.J. and Marra, M.A.,
Hanner and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                            Homosapiens S100 calcium binding protein A10 (annexin II ligand, calpactin I, light polypeptide (pll)), mRNA (cDNA clone MGC:23737 BC015973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               be found
TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGGCGGCGGACGCTGGGCGGGGGGG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 673)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (22-OCT-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clone distribution: MGC clone distribution information can be for
through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAL Plate: 32 Row: e Column: 16.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LiNL) DNA Sequencing by: Institute for Systems Biology http://www.systemsbiology.org contact: amadanmesystemsbiology.org Anup Madan, Jessica Enhap, Erin Helton, Mark Ketteman, Anuradha Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                  TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGCGGCGGCGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                CTGGACGCGGGCGGAGAGGCGAGCGCGCGCGCGCTGTG 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                       CTGGACGCGGGCGCAGCGCGAGCGCGGCCGGCTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
|Mol_trype="mRNA"
|db xref="taxon:9606"
|clone="MGC:23737 IMAGE:4103596"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                   BC015973.1 GI:16359017
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 673)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . .673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg, R.
                                                 98
    541
                                                                                                                                          38
                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                         BC015973/c
                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
```

420

480

540

42

ö

ö

522

120

462

Page

```
PAT 15-MAY-2004
                                                                                                                                                                                                                                  1 (bases 1 to 649)
Stanton,L.W., White,R.T., Damm,D.L., Lewicki,J.A., Joly,A. and Schreiner,G.F.
Schreiner,G.F.
Methods for detection and use of differentially expressed genes in disease states
Patent: US 6709855-A 36 23-MAR-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          469 GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         649 GGAACTAAAAAAGAACTTTATTATTTATTGGGGAAGGGGATGCAAACAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                529 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGGGGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           589 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2,
                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 601; DB 6; L
Pred. No. 1.2e-117;
0; Mismatches 0;
                                                                                                    AR489221
Sequence 36 from patent US 6709855.
                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625
                   27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .649
/organism="unknown"
CTGGACGCGGGCGGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGGGGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR489221.1 GI:47256166
                                                                                                                                                                                                                                                                                                                                                                                                                                 50.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.7
Matches 623; Conservative
                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                              .
Unknown.
                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                   51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                      source
                                                                   RESULT 5
AR489221/c
                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/ldb_xref="taxon:9606"
/loce="unnamed protein product"
/codon start=1
/protein_id="CAH5951.1"
/db_xref="d1:53791166"
/translation="MPSQMEHAMETWMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGRVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
     04-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09
                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTTTTGTCCACAGCGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITACATITICCTAAGTGTCCTGATCTCTGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAACTGGGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                 Yeh, L.A., Cuny, G.D., Padmanaban, D. and Ding, K. Methods and compositions for neurite outgrowth detection Patent: WO 2004080424-A 3 23-SEP-2004; THE BRIGHAM AND WOMEN'S HOSPITAL, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
     PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

50.1%; Score 601; DB 6; Length 649;

Best Local Similarity 99.7%; Pred. No. 1.2e-117;

Matches 623; Conservative 0; Mismatches 0; Indels
   linear
649 bp Di
Sequence 3 from Patent WO2004080424.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601 CTGGACGCGGGGGGGAGAGGCGAGC 625
                                                                                                                                                                                                                                  Location/Qualifiers
1. .649
                                                CQ878718.1 GI:53791165
                                                                                   Homo sapiens (human)
                                    CQ878718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                     source
               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                ORGANISM
                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
```

유

a

õ

ò

ያ ያ

g

8 6

g

8

ò

g

8 8

qq ð g ò

ò

```
/trānslation="MPSQMEHAMETWMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLB
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rereceracirerrecerrerecricarereranacaaaaragrearrecaare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         191 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                   .;
%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 50.1%; Score 601; DB 6; L Best Local Similarity 99.7%; Pred. No. 1.2e-117; Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                          /note="unnamed protein product"
/codon start=1
/protein id="CAD88531.1"
/db_xref="G1:29786760"
                                  DNA
                              649 bp
7 from Patent WO03016917
                                                                          AX710164.1 GI:29786759
                                                                                                         Homo sapiens (human)
                                                                                                                           Homo sapiens
                              AX710164
Sequence
                                                          AX710164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
              AX710164/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                   source
                                                                                                                           ORGANISM
                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                   FEATURES
   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       д
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                PAT 14-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGGAGCTCTGGAAGCCCACTTTGCCATCTTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATITGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGTCTTTTTGATTTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Greadecceceantradedaaaadaadercregaadececaetrrecearetracaeres 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25
                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTGTGGTCCGTTGAAGCCTTGGCCCGAGGCGCGCGGACGCTGGGCGAAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                  Alvares,C., Horne,D., Peres-da-Silva,S. and Vockley,J.G. Gene expression profiles in liver cancer Patent: WO 0229103-A 2350 11-APR-2002; GENE LOGIC US)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                                                                                                                                                                                                                                                                                                         50.1%; Score 601; DB 6; Length 649; 99.7%; Pred. No. 1.2e-117; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                            /note="EMBL/GenBank Accession No. M38591"
                                linear
                     AX409703 649 bp DN
Sequence 2350 from Patent WO0229103.
AX409703
                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGGGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGCGAGAGGCGAGC
                                                                          AX409703.1 GI:21442408
                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                        623; Conservative
                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51
                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                         Best Local
                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                   source
              AX409703/c
LOCUS
                                           DEFINITION
                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                  JOURNAL
RESULT 6
                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
```

ď

Gaps

9

120 530 180 470 240 480

171 540 111

231

351

```
/protein id="AAA58426.1"
/db xref="GI:180596"
/translation="MPSQMEHAMETMMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Original source text: Homo sapiens (tissue library: lambda-GT10) adenocarcinoma cDNA to mRNA.

Draft entry and computer-readable sequence for [Unpublished (1990)] kindly submitted
by V.Gerke, 17-SED-1990.

Max-Planck-Institute for Biophysical Chemistry
                                                                                                                                                                                                             mRNA linear PRI 31-DEC-1994
annexin II (pl1) mRNA, complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 530
                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                               M38591.1 GI:180595
cellular ligand of annexin II.
floon sapiens (human)
Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases I to 649)
Kube, E., Weber, K. and Gerke, V.
Primary structure of human, chicken, and Xenopus laevis pll, a
Genlular ligand of the Src-kinase substrate, annexin II
Gene 102 (2), 255-259 (1991)
                                                   52
                                      589 AAGCTTATCTGGTATTTAACTTTTTCTTTCTTCTGTGAAATGAGAGAGTTAGATTTTATT
                    541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'product="cellular ligand of annexin II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 50.1%; Score 601; DB 9; I
Best Local Similarity 99.7%; Pred. No. 1.2e-117;
Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="maxxx"
/db_xref="taxcn:9606"
/cell_line="HT29"
/tissue_type="adenocarcinoma"
/tissue_lib="lambda-GT10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
                                                                                                                                                                                                                 HUMCLANNII 649 bp
Homo sapiens cellular ligand of
                                                                                        601 CTGGACGCGGGCGGAGAGCCGAGC 625
                                                                                                                         27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D-3400 Goettingen, FRG.
Location/Qualifiers
                                                                                                               51 CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dept Biochemistry
Am Fassberg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          112. .405
/gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1, .649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1831433
                                                                                                                                                                                                                                                                M38591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polyA_site
                                                                                                                                                                              RESULT 9
HUMCLANNII/c
                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                 a
                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                              PAT 14-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rrracarrrecraagrerecrearerecreargaaarecrrerargeggaagereregg 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGAGGAGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                    52
                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
TTGGTGTGGTGCGTTGAAGCCTTGG-CGAGGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACACACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                       Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S. Dugas, M., Ells, R., Brors, B. and Mergenthaler, S. Novel genetic markers for leukemias Patent: WO 031039443-A 1992 LIS-MAY-2003; Deutsches Krebsforschungszentrum (DE); Ludwig-Maximilian-Universitaet Muenchen (DE); Haferlach, To PD Dr. Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 50.1%; Score 601; DB 6; Length 64' Best Local Similarity 99.7%; Pred. No. 1.2e-117; Matches 623; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                              linear
                                                                                                                                                                            AX779835 649 bp DNA Sequence 1992 from Patent WO03039443. AX779835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                     625
                                                                         Location/Qualifiers
                                                     CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                 AX779835.1 GI:32696829
                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 230
                    110
                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                           RESULT 8
AX779835/c
                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  рp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                    유
                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                     ઠે
```

٠. د

240

300 311 131

71

11

550 120

us-10-735-577-16.rge

```
/translation="MPSQMEHAMETWMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE MOKDFLAVDKIMKDLDQCRDGRVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK" 584. .593 /gene="calpactin 1 light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 15-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stanton, L.W., White, R.T., Damm, D.L., Lewicki, J.A., Joly, A. and Schanton, L.W., White, R.T., Damm, D.L., Lewicki, J.A., Joly, A. and Schreiner, G.F.
Methods for detection and use of differentially expressed genes in disease states
Patent: US 6709855-A 24 23-MAR-2004;
1. ostion/Qualifiers
1. 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             429 GCAGATTCCTTAAGCGACCCTTT-GGACACATCTTATCAGGGAGGAGCGAACTGCTGTT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                          310 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACCTTTGCCATCTCTACACTGG 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCTTTTATCCCCA 480
                                                                                                                                                                                                                                                               TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                 190 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                       549 AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTCGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130 GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                              1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                     ä
                                                                                        Length 609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                  Score 598; DB 9; I
Pred. No. 5.2e-117;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR489209 579 bp
Sequence 24 from patent US 6709855.
AR489209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR489209.1 GI:47256154
                                                                                     49.9%;
llarity 99.8%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGG 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
                                                                                                    Local Similarity
les 609; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                               polyA_signal
                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                            489
                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
AR489209/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                        g
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRI 31-DEC-1994
               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                   GCGAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                        240
                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG 300
                                                                                                                                              GTGAGGCCCCCAATTAGGGAAAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                        TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                             TIGGIGIGGICCGIIGAAGCCIIIGGCCGAGGCGCGCGGAGCGCIGGCCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Original source text: Homo sapiens (tissue library: lambda gtll) cDNA to mRNA.
                                                                       GCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTTGG - CGAGGCGCGCGCGCACGCTGGGCCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M01457.1 GI:179874

Calpactin I light chain.
Homo sapiens (human)

W Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases I to 609)

Dooley, T. P., Weiland, K. L. and Simon, M.
CDNA sequence of human p11 calpactin I light chain
Genomics 13 (3), 866-868 (1992)

1386341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 הטיירה האראום 609 bp mRNA linear
Human calpactin 1 light chain mRNA, complete cds.
M81457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="calpactin 1 light chain"
/codon_start=1
/product="calpactin 1 light chain"
/protein_id="AAAA58404.1"
/db_xref="GI:179875"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /map="presumed at 1921"
/cell_type="primary keratinocyte"
/tissue_lib="lambda gt11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'gene="calpactin 1 light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGACGCGGGGGGGGGGGGG 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609.
                                          529
                                                                                                                                 241
                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                              290
                                                                                                                                                                                                                                                                                                                                      230
                                                                                                                                                                                                                                                                                                                                                                                               170
                                                                                                                                                                                                                                                                                                                                                                                                                                                        110
                                                                       181
                                                                                                    469
                                                                                                                                                            410
                                                                                                                                                                                         301
                                                                                                                                                                                                                      350
                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HUMCALPA1L/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                            8 S
                                                                                                                     र्व क्षे
                                                                                                                                                                                                           8 6 8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 S
               8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
```

ω

```
AX179865

Macaca mulatta S100 calcium binding protein A10 (S100A10) mRNA, complete cds.

AX179865.1 GI:27802540
                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                            120
                                                                                                                                             88 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT 147
                                                                                                                                                                                        180
                                                                                                                                                                                                                      207
                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                 267
                                                                                                                                                                                                                                                                                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                     387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        567
                                                                  60
                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 646)
Sun,X.-Y., Tan,Y.-F., Qin,L., Bai,S.-X., Li,F.-X., Qiu,W.,
Piao,Y.-S. and Wang,Y.-L.
Molecular cloning of genes critical to embryo implantation from Thesus monkey by suppression subtractive hybridization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sun, X.-Y., Tan, Y.-F., Qin, L., Bai, S.-X., Li, F.-X., Qiu, W., Sun, X.-Y., Tan, Y.-F., Qin, L., Bai, S.-X., Li, F.-X., Qiu, W., Diact Submission
Submitted (14-NOV-2002) State Key Laboratory of Reproductive Biology, Institute of Zoology, Chinese Academy of Science, Bei Huan Xi Lu, #25, Hai Dian District, Beijing 100080, China Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                   388 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                        TITACATITIGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                          148 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                     268 rereceraerrecerrecerreserrerecracaaarraerearrecaare
                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                       328 GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                 1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                     361 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                    Gaps
                                    ö
   Length 571,
                                   Indels
   Score 537; DB 6; L
Pred. No. 5.2e-104;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macaca mulatta (rhesus monkey)
Macaca mulatta
   Query Match
Best Local Similarity 98.7%;
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    568 TTGG
                                                                                                                            61
                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
AY179865/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                  ò
                                                                                             g
                                                                                                                            Š
                                                                                                                                                     g
                                                                                                                                                                                        à
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                             pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 18-MAY-2002
                                                                                               2
                                                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                            120
                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGACGGTCTTTTTGATTTTCCAAAAATCCA 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                         colon
                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGATTAGATTTTATT
                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGCCAAGGGGATGCAAACAATACAAAATCAA
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            King, G.E., Meagher, M.J., Xu,J. and Secrist, H. Compositions and methods for the therapy and diagnosis of
                                                                                               7
                                                                  Length 579
                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGTGTGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGAC
                                                               Score 557; DB 6; L
Pred. No. 2.9e-108;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 0212328-A 890 14-FEB-2002;
CORIXA CORPORATION (US)
LOCATION/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          571 bp 1
WO0212328.

    .571
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 890 from Patent
AX396675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX396675.1 GI:21067422
                                                              46.5%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                               Conservative
                                                                               Best Local Similarity
Matches 579; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX396675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer
                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                     519
                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                 459
                                                                                                                                                                                                                                                                                                                                            399
                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                                                               Query Match
                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
AX396675
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                   ORIGIN
```

Dp

ò 용 ò 셤

8 6 ò

8 8 8

원 ò 8 8 品 公 品 谷

σ

ä

523 149 463

83

209

g ઠ 셤

8 %

중 음

ò

a ò g ∂ 임 ò g 8 쉱 8

329

285

269

389 225 449 509

107 569

47

167

Thu

```
PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                           CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTT--GACA 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                           404 ACTCTTATCAGGGAGGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCAT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCGTTGAAGCCTTGGCCGA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGGGTC - TTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                           GICCICCITIGITAAGIAGCCTITIAICCCCAGCGAATITIGIGAAAIGIAAACAICAIGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTTCCTTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                               4;
                                                                                                                                                                 Length 582;
 Expressed sequence tags and encoded human proteins Patent: EP 1033401-A 14898 06-SEP-2000; Genset (FR)
                                                                                                                                                               Query Match 43.6%; Score 523; DB 6; Length 58 Best Local Similarity 97.9%; Pred. No. 5.1e-101; Matches 547; Conservative 4; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  582 bp DNA human protein.
                                                               1. .582
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence tag and encoded BD034568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD034568.1 GI:22576310
JP 2001269182-A/10814.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGCGGCGGACGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCGCGGGCTGTGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD034568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                               30
                                                                                                                                                                                                                                                             582
                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                             522
                                                                                                                                                                                                                                                                                                                                                             150
                                                                                                                                                                                                                                                                                                                                                                                             462
                                                                                                                                                                                                                                                                                                                                                                                                                             210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
BD034568/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
     TITLE
JOURNAL
                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                            /gene="S100A10"
/gene="S100A10"
/codon_start=1
/product="S100 calcium binding protein A10"
/protein_id="AA021200.1"
/protein_id="AA021200.1"
/bx xref="G1:27802541"
/translation="WRSQMEMEMMETMMFTFHKFAGDKGYLTKEDLRYLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYPVVHMKQKGKK"
                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                               617 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 558
                                                                                                                                                                                                                                                                                                                                                                                             557 AAGCTTATCTGGTATTTAACTTTCCTTTCTCAGCTTGTCAAATGGGAGTTAGATTTATT 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTCAAGCGACCCTTTGGGACAGCTCTTGTCAGGGAGGAGGAATTGCTCGTT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTGTCCACAGCCCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     257 TCCAGGTCCTTCATTATTTTGTCCACGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197 GGAAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTTGAAATGAGAGTTAGATTTTTTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       317 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACTTTGCCATCTCTGCACTGG 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dumas Milne Edwards, J.B., Duclert, A. and Giordano, J.Y.
                                                                                                                                                                                                                                           Length 646;
                                                                                                                                                                                                                                           Query Match 44.2%; Score 530; DB 9; Length 64 Best Local Similarity 96.4%; Pred. No. 1.7e-102; Matches 542; Conservative 0; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Se2 bp DNA Sequence 14898 from Patent EP1033401. AX899035
/organism="Macaca mulatta"
/mol_type="mRNA"
/db_xref="taxon:9544"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTCCGTTGAAGCCT 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGGIGIGGICTGITGAAGCIT 56
                                                              /gene="S100A10"
79. .372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX899035.1 GI:40053948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      437 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        497
                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX899035/c
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
VERVORDS
SOURCE
ORGANISM
                                                    gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
                                                                                CDS
```

ij

476 127 416

67

187

356 247 296 307 236 367 176 427

```
PAT 20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     175 CCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACT
                                                                                                                                                                                                                                                                                                                                535 AAAAAGACCTTTATTTATTGAGGCAAGGGGATGCAACCAATCCAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                TCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                                                                                                                                                                                                                                                                                                                                               475 TCTGGTATTTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTAAGCGACCCTTTGGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccecaattagegaaaagaagctctggaagcccactttgccatctctacactggtccaggt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTTCATTATTTTGTCCACAGGCCAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      115 CCTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCAGGAATT
                                                                                                                                                                                                                                                                                              AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
        Mammalia; Butheria; Primates; Catarrhini; Hominidae;
                        liew,C.C., Marshall,W.E. and Zhang,H. Compositions and methods relating to osteoarthritis Compositions and methods relating to osteoarthritis Patent: WO 02070737-A 47618 12-SEP-2002; Chondrogene Inc. (CA)
                                                                                                                                                                                                                             Length 538
                                                                                                                                                                                                                            Match
Local Similarity 98.9%; Pred. No. 1.6e-99;
les 530; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human cdnas and proteins and uses thereof
Patent: WO 02094864-A 1 28-NOV-2002;
GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA

    .538
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1 from Patent W002094864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1
Bejanin,S. and Tanaka,H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX616317.1 GI:28447361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                68
                                                                                                                                                                                                                                                                                                                                                                                                                                  128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 17
AX616317/c
LOCUS
DEFINITION
                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                        REFERENCE
AUTHORS
                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                           FEATURES
                                                                                                                                                                                                                             Query |
Best L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                ò
PD 04 24-FEB-2000 2. PF 24-FEB-1999 US 60/4-1 PR 24-FEB-1999 US 60/4-1 PR 24-FEB-1999 US 60/4-1 PR 25-FEB-1999 US 60/4-1 PR 25-M BAPUTIST DUMAS MILNE EDWAN...
PI JORDAN PC C12N1S/09, C07K14/435, C07K16/18, C12N1/15, C12N1/19, C12N1S/10, PC C12N1S/10, PC C12N1S/10, PC G06F15/40

Location/Qualifiers.
Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 03-FEB-2004
                                                                                                                           М
                                                                                         Ы
                                                                                                                                                                                                                                                                                                                                                                                                                 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                    149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCCTTCTGCTTCAT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGGGTC--TTTGATTTTCCAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTAG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT 509
                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                   TCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGCCTTT--GACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCCTTCTTGTTAAGTAGCCTTTATYCCCAGCGAATTTGYGAAATGTAMACRTCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGTCCGTTGAAGCCTTGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTCCGTTGAAGCCTTGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTTATCAGGGAGGGAGCGAACTGCTCATTTCTGCCTACTTCTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                 4,
                                                                                                                                                                                                                                                                                                              43.6%; Score 523; DB 6; Length 582; 97.9%; Pred. No. 5.1e-101;
                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 47618 from Patent W002070737.
CQ702692
                                                                                                                                                                                                                                                                                                                                                4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGCGCGGACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CQ702692.1 GI:42263461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gececeeceecrarecec
                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 547; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                                                 30
                                                                                                                                                                                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46
                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 16
CQ702692/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                               ORIGIN
```

g

ò 셤 ò

g ò g ò g 8 6 ò 유 ∂ 염

유 ઠે 움

ò

116

487

ч

180

240

요 ઠે g

ઠે

g ઠે g 8

ઠે

419

```
PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 119
                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361 TCCAGGTCCTTCATTATTTTGTCCACAGGCCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                   358 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGGCAGGGCTCTTTTTGATTTTCCAAAAATCCA 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                       418 AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTTGTGAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT
                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                  TITACATITIGCIAAGIGICCIGAICTGCICAIGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                           181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                    DB 6; Length 482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 57930 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38.5%; Score 461.4; DB 6; 98.7%; Pred. No. 6.8e-88; iive 0; Mismatches 6;
                                                                                                                                  39.3%; Score 471.6; DB 6
.larity 99.2%; Pred. No. 4.5e-90;
Conservative 0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CQ713004 472 bp DNA
Sequence 57930 from Patent WO02070737.
CQ713004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. 472
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    .482
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQ713004.1 GI:42273861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                      Local Similarity
les 474; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 465;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 19
CQ713004/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                   1435...1839
// note="unnamed protein product"
// note="unnamed protein product"
// note="unnamed protein product"
// note="unnamed"
// protein id="CAD67623.1"
// db_xref="G1:28447362"
// db_xref="G1:28447362"
// canalation="MAACQLLENTTPLRETFSCLPRPRTEPLVASTDHTKMPSQMEH
// AMETWMFTHKRADAGCYLLENDLRVLMEKEFPGFLENQKDPLAVDKIMKDLDQCRDG
KVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
1937. . 2016
1955. . 1970
2001. . 2016
                                                                                                                                                                                                                                                                                                                                                                                                         TTTTTTTTTTTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1652 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                   132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rccargagracicrcaggrecrcrrrrgiraagragecrrratececcagegaartrgrga 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                             133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITCCCTICTGCTTCATGTACTACAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1712 ATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                   73 TATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTGAAGCCTTGGCCCGAGGCGCGGCGACCTTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT
                                                                                                                                                                                                                                                                                                      Score 485.2; DB 6; Length 2016;
Pred. No. 6.7e-93;
0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: W0 02070737-A 46392 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CQ701466 4392 from Patent WO02070737.
Sequence 46392 from Patent WO02070737.
CQ701466.1 GI:42262233
     DNA
/mol_type="unassigned
/db_xref="taxon:9606"
1. .1434
                                                                                                                                                                                                                                                                                                      40.5%;
ilarity 94.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 502; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                         polyA_signal
polyA_site
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                       2012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CQ701466/c
LOCUS
DPFT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                     5'UTR
CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
```

요

ò

8 유

음 수 음

⋧ g ö 132

ò 원 8 8

8 6

강 쉽

8

ò

g

ò 9

ò

```
PAT 03-FEB-2004
                                                                                                                                                                                         482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       355
               302
                                          181
                                                                      362
                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         427
                                                                                                                               363 CAGGICCITCATTATTTTGICCACAGGCCAGAGGGICTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55
                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                             180 GAGGCCCGCAATTAGGGAAAACAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                              414 TCTGGTATTTTAACTTTTTTTTTTTTTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                           423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                         GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTTCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              474 AAAAGAACTITATITATIGAGGGCAAGGGGATGCAAACNACCNCAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68 TCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   354 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTICITICCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           174 CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 474;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 56036 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>ښ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37.2%; Score 446.4; DB 6
98.9%; Pred. No. 1.1e-84;
ive 0; Mismatches 3
                                                                                                                                                                                                                                                                                       Sequence 56036 from Patent WO02070737.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .474
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                        CQ711110.1 GI:42271967
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 98.99
               243
                                                                      303
                                                                                                                                                                                                                      09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ο.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          368
                                                                                                                                                                                                                                                                 RESULT 21
CQ711110/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                   g
                                                                                             용
                                                                                                                               ò
                                                                                                                                                          g
                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                     8
                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-FEB-2004
                                                                                                                                                                                                                                                                   432
                          AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                       252
                                                                                                                                              312
                                                                                                                                                                                                         372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATTCCTTAAGCCGACCCTTTGGGCAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 241
                                                                                                                 293
                                                                                                                                                                           233
                                                                                                                                                                                                                        ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 173
                                                                                                                                                                                                                                                                               GITATITIGICCACAGCCAGAGGICTITITIGATITITCCAAAAATCCAGGGAACTCCTTT 113
                                                                                                                                                                                                                                                                                                                            TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62
                                                                                                                                                                                                                                                                                                                                                       53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                    TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTAAAAAAAGACCTTTATTTATTGAGGGCAAGGGGATGCAACCAATCCAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                           Tricccriciscricatereraciaciaciaciaeraciaerearidearidearidereageceeea
                                                                                                                                                                                                         ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                 ATTATTTTGTCCACAGCCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 AACTAAAAAAGAACTTTATTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                    AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT
                                                                                                                                                                                                                                                                                                                                                                                                                  ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                    AATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGAGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 49122 12-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37.4%; Score 448; DB 6; Length 48
95.8%; Pred. No. 4.9e-85;
ive 0; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 49122 from Patent WO02070737.

    .480
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CQ704196.1 GI:42264965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 95.8
Matches 460; Conservative
                                                       412
                                                                                                                352
                                                                                                                                                                           292
                                                                                                                                                                                                                                   232
                                                                                                                                                                                                                                                                 373
                                                                                                                                                                                                                                                                                             172
                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                       112
                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                              52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                           133
                                                                                    193
                                                                                                                                              253
                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 20
CQ704196/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOUNCE
ONGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

ORIGIN

g

ò

8 6

상 점

ò 8

፳

```
/proteIn_id="AAA30423.1"
| DiscreTin_id="AAA30423.1"
| Ab xref="Gd1:162785"
| Aranalation="WARSQWHENDWFTFHKFAGDKGYLFKEDLRVLMEKEFPGFLE
| NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364 ATGCTGCCTACTTCTCCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCGA 305
                                                           Saris, C.J., Kristensen, T., D'Eustachio, P., Hicks, L.J., Noonan, D.J. Hunter, T. and Tack, B.F.

CDNA sequence and tissue distribution of the mRNA for bovine and murine pl1, the S100-related light chain of the protein-tyrosine knase substrate p36 (calpactin 1)
37. Biol. Chem. 262 (22), 10663-10671 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTTATCTGGCTTTAATTGACTTTTCTTTCTCTGCTTCTCAAAATGGAGTTGGATTTTA 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCCAGGTCCTTCATTATTTTGTCCACGCCCAGAGGTCTTTTTGATTTTCAAAAATC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCTTCCTTTGTTAAGTAACCTTTATCAC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCGAATTGTGAAATGTAAACATCGTTTCCATGGCGTGTTCCATTTGAGATGGCG 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACT 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCCAGGTCCTTCATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATC 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                                             Draft entry and printed copy of sequence for [1] kindly provided k
B.F.Tack, 20-JUL-1987.
Polyadenylation signals are located at positions 481-486, 525-530
                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
Bovinae; Bos.
                                                                                                                                                                                                                               Original source text: Bovine intestine epithelial cell, cDNA to mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGACAGAGTCCTTAAGTGACCCTTTATGAGAATTCTTATCAGGGTGGGAGTAATTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTAAAAAAGGAATTTGTTTATTGAGAGCAAGAGGATGCAAGAAAAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTTATCTGG---TATTTAACTTTTCTTTCTTCTTGCTAAATGAGAGTTAGATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrrgracarrrrcrargegree-carargerea-gaaareerraracagggaagerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTTACATTTGCTAAGTGTCCTGATCTCTCATGAAATCCTTCTATGGGGGAAGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304 regreaecceaecearraeceaaaaeaaecrereeaaecceaerreecerereaece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
ت
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 36.2%; Score 434; DB 4; Length 604; Local Similarity 88.6%; Pred. No. 4.8e-82; les 505; Conservative 0; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            64. .357
/note="calpactin I light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                           'product="calpactin I lc mRNA"
                                                                                                                                                                                                                                                                                                                                                                     'organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:9913"
1. .604
                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  upstream of Ncol site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon start=1
                                                                                                                                                                                                                                                                                                                                                   1. .604
                                                                                                                                                                                                                                                                                                                    and 578-583.
                                                                                                                                                                                                                3038891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                        source
     ORGANISM
                                                                      REFERENCE
AUTHORS
                                                                                                                                                                          JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SGO
                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ысуслыкі
Bovine calpactin I light chain (pl1) mRNA, complete cds.
M6464 J02779
M16464.1 GI:162784
calpactin I light chain; protein kinase; tyrosine kinase.
Bos taurus (cow)
                                                                                                                         PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCAT 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388 AAAGCTTATCTGGTATTTAACTTTTGTTTGTTGTCAAATGAGAGTTAGATTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITIACAITIGCIAAGIGICCIGAICIGCICAIGAAAICCIICIAIGGGGAAGCIGIGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      328 TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAATCA 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTGAGGCCCGCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCCAGGTCCTTCATTATTTTGTCCACAGAGAGGTCTTTTTGATTTTTCCAAAAAACC 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
     480
CCTTTTCCATGAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 6; Length 448;
                                                                                                                                                                                                                                                                                            Liew, C.C., Marshall, W.E. and Zhang, H. Compositions and methods relating to osteoarthritis Patent: WO 02070737-A 56504 12-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36.2%; Score 434.4; DB 6
llarity 99.6%; Pred. No. 3.9e-82;
Conservative 0; Mismatches 1
                                                                                                                  Sequence 56504 from Patent W002070737.
                                                                                                                                                                                                                                                                                                                                                                                     1. .448
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGGAACTCCTTTTCCATGAGTACTCTC 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                          CQ711578.1 GI:42272435
                                                                                                                                                                                                                                                                                                                                                   Chondrogene Inc. (CA)
                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 446; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
 428
                                  54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 23
BOVCALPI/c
                                                                                     RESULT 22
CQ711578/c
                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
 ઠ
                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

238

178 425

543 118

61

298

245

```
401 GGGGGAGAGGGGGGGGGGGGGGGTTCCTTAGTACGTGCGGCGGCGGTAG 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161 rerahactricterreagradadecerecrecrecregaratri--aesecareceaece 104
                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (basea I to 40 and Gerke, V.
Cloning and characterization of the human gene encoding pll: Structural similarity to other members of the S-100 gene family 92241679
                                                                                                                                                                                                                                     source text: Homo sapiens (tissue library: lambda-FixII)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461 CCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGACGTGGGCGACGTGGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103 TGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAAGAACCCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             560 CCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAGC-----TGGACGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         611 GGCGGAGAGGCGCGCGCGGCCTGTGCCCTTCCTTAGTACGTGCGGCGCGGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGGAGGCGCCGCGGAGCGGAAGCCTTGGCGGGCGCTCGGCAGGGCGCTCCCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221 cerececrecerecesacesecreseasaseseresecesecesasasaseserrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTAAACTICTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       911 TGAGCCTGCCCTTCCTCTCGGGTTTTGGAAAGTGTACAAATCAAAGAACCCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 389.2; DB 9;
Pred. No. 1.7e-72;
0; Mismatches 13;
                                                                                                                                                                                                                                                                                                                  /mol_type="genomic_DNA"
|/mol_type="faxon:9606"
|/cell_type="fibroblast"
|/tissue_lib="lambda-FixII"
|92...402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="p11"
/note="beta-DRE element"
220. .227
                                                                                                                                                                                                                                                                                    1. .480
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                             element"
    Human pll protein gene sequence.
                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="beta-DRE
176. .183
                                                                                                                                                                                                                                                                                                                                                                                            /gene="p11"
92. .100
/gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="pl1"
395. .402
/gene="pl1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 32.5%;
Best Local Similarity 94.6%;
Matches 439; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="p11"
                                                pll protein.
Homo sapiens (human)
Homo sapiens
                                  M77483.1 GI:189420
                                                                                                                                                                                                                          1533380
Original
                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GC signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            851
                                VERSION
KEYWORDS
SOURCE
ORGANISM
 DEFINITION
ACCESSION
                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                         MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRI 07-JAN-1995
                                                                                                                                             PAT 14-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                            Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S., Dugas, M., Eils, R., Brors, B. and Mergenthaler, S.
Novel genetic markers for leukemias
Patent: WO 0303943-A 43 15-MAY-2003,
Deutsches Krebsforschungszentrum (DE);
Ludwig-Maximilian-Universitaet Muenchen (DE); Haferlach, Torsten,
PD Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126 ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GICCIICAITAITITGICCACAGCCAGAGGGICTITITGAITITCCAAAAAICCAGGGAA 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCAGCGAA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
    65
                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAA
CTGCAAATTTGTGAAATGTGAACATCATGGTTTTCCATGGCGTGCTCCATTTGAGACGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAACTGCTCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGIGAAAIGIAAACAICAIGGIITICCAIGGCGIGITCCAITIGAGAIGGCAITIIGGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 423; DB 6; Length 434;
Pred. No. 1e-79;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                             linear
                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                  TTTTGGTGTGGTCCGTTGAAGCCTTGGCCG 568
                                                  Sequence 43 from Patent W003039443. AX777886

    .434
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480 bp
                                                                                                                                                                                       AX777886.1 GI:32694880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35.3%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTCCGTTGAAGC 560
                                                                                                                                                                                                                      sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.8
Matches 434; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMP11A
                                                                                                                                                                                                                        Ношо
                                                                                                                                                                                                                                        Homo
                                539
                                                             64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15
                                                                                                      AX777886/c
LOCUS
                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 25
HUMP11A/c
LOCUS
                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
 요
                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

m

670

730 282 790 222 850 910

q ò

```
/codon start=1
/product="similar to calpactin I light chain"
/protein_id="BAC56353.1"
/db xref="G1:2B19334"
/translation="GDKGYLTKEDLRVLMEKEFPGFLENQKDPLAVDKIMKDLDQCRD
GKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   This work was performed to collaborate with Developmental Biology Department, National Institute of Agrobiological Sciences. Address: 2 Ikenodai, Taukuba, Ibaraki, 305-8602 Japan. Phone & Fax: 81-29-818-8633 — e-mail: karuha@affrc.go.jp This work was funded by Organized Research Combination System (ORCS) project of Ministry of Education, Culture, Sports, Science
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               302 TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT 361
Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
Bovinae; Bos.
                                                                                                                                                                                                                        Tranjanco, G., Ishiwata, H., Katsuma, S., Kizaki, K., Patel, O.V., Nakano, H., Kono, T., Ushizawa, K., Takahashi, T., Imai, K., Hirasawa, A., Shiojima, S., Ikawa, H., Suzuki, Y., Izaike, Y., Direct Submission
Submission
Submitted (25-DEC-2002) Gozoh Tsujimoto, National Research Institute for Child Health and Development, Department of Molecular, Cell Pharmacology; 3-35-31 Taishido, Setagaya, Tokyo 154-6867, Japan (E-mail:gtsujimoto@nch.go.jp, Tel:81-3-3149-2476, Pax:81-3-3149-1252)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 TTATCTGGCTTTAATTGACTTTTCTTTTCTCTCTCAAAATGGAGTTGGATTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 GTACATTTTCTATGGGTCC-CATATGCTCA-GAAATCCTTATACAGGGGAAGCTGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        179 CAGAGTCCTTAAGTGACCCTTTATGAGAATTCTTATCAGGGTGGGAGTAATTGCTCAATG
                                                               Ishiwata,H., Katsuma,S., Kizaki,K., Patel,O.V., Nakano,H., Takahashi,T., Imal,K., Hirasawa,A., Shiojima,S., Ikawa,H., Suzuki,Y., Tsujimoto,G., Izaike,Y., Todoroki,J. and Hashizume, Characterization of gene expression profiles in early bovine pregnancy using a custom cDNA microarray
Mol. Reprod. Dev. 65 (1), 9-18 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CINTAAAAGGAATAAAGTITATTGAGAGCAAGAAGGATGCAAGCAATATAAAAATCAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65 TTATCTGG---TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGATICCTITAAGCGACCCTITIGGGACAACICTITAICAGGGAGGGAGCGAACIGCTCAITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239 creccracircrecerrerecratereraciaeana and caractecare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Bos taurus"
/mol_type="mkNn"
/mol_type="mkNn"
/db xref="taxon:9913"
/clone="ORCS13327"
/clone="the="ORCS bovine utero-placenta/dev stage="adult"
/note="mixture of uterus and placenta"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
31.2%; Score 374.2; DB 4
Best Local Similarity 86.0%; Pred. No. 2.7e-69;
Matches 461; Conservative 0; Mismatches 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          complement (<246. .>476)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    end partial sequence.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Technology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                      MEDLINE
                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                              PUBMED
                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AB098817 534 bp mRNA linear MAM 12-APR-2003 Bos taurus mRNA for similar to calpactin I light chain, partial cds, clone: ORCS13327.
                                                                                                                                                                    03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTCGG 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGT-GG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92
                                                                                                                                                                                                                                                                                                            Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bos taurus
Bos taurus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                      PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 392;
                             1014
                                                                                                                                                                                                                                                                                                                                                                                            osteoarthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                               Н
                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 377.4; DB 6.
Pred. No. 5.4e-70;
0; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                 Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to ost
Patent: WO 02070737-A 45565 12-SEP-2002,
                                                                                                                                                     392 bp DNA Sequence 45565 from Patent W002070737. CQ700639.1 GI:42261406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCCAGGTCCTTCATTATTTTGTCCACAGCC 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCCAGGTCCTTCATTATTTTGTCCACAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:28189323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389; Conservative
                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AB098817
AB098817.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                         RESULT 26
CQ700639/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 27
AB098817
                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PEATURES
                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
```

g

ò a ઠે g

g

ઠે

g

ઠે

셤

8

ò

4

us-10-735-577-16.rge

g

음 ò g

ò 유

ઠે

```
/db xref="taxon:10090"
/clone="MGC:36182 IMAGE:4949465"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                              Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/strain="FVB/N"
                                                                                         BC025044.1 GI:19263549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 604)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                            SOURCE
ORGANISM
     3C025044/c
                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                          ACCESSION
                                                                                                                                                                                                   REFERENCE
                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                              PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGGAACTGCTCATTTCTGCCT 139
                                                       421
                                                                                         CCAGGICCTICATIATITIGICCACGCCAGAGGGICTTITIGATITICCAAAAAICCAG 418
                                                                                                                            GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATC-CCCA 480
                                                                                                                                                              GGAACTCCTTTTCCATGAGTACTCTCAGGTCTTCCTTTGTTAAGTAACTTTATCACCTG 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAGACTTTATTTATTGAGGGCAAGGGGATGCAACCAATCCAAAAATCAAAAGCTTA 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGGGGACTGCTCATTTCTGCCT 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTICITICCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGGG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccecaartagegaaaagaagcrcregaagcccacrtrreccarcracacregerccaegr 19
CTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTICITICCCTICICCTICATGIGINCIACAAATAGICATIGCATGCAATGGIGAGGC
                                                                                                                                                                                                 481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGG 536
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Liew, C.C., Marshall, W.E. and Zhang, H. Compositions and methods relating to osteoarthritis Patent: WO 02070737-A 54057 12-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 363.6; DB 6; Length
Pred. No. 4.7e-67;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                           CQ709131
Sequence 54057 from Patent WO02070737.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chondrogene Inc. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                               CQ709131.1 GI:42269942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 98.7%;
Matches 366; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTCATTATT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTCATTATT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                              419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78
                                                                                         359
                                                                                                                            422
                                                                                                                                                                                                                                   479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               368
                    299
                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                        CQ709131/c
                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29
```

FEATURES

LOCUS

DRIGIN

임

ò 용 ò g ò 유 ò RESULT

g

g

ò

ò

/tissue_type="Mammary tumor. C3(1)-Tag model. Infiltrating dettal carcinoma. 5 month old virgin mouse." /clone_lib="NC1 CGAP_Mam6" /lab_host="DH10E" Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 60 Row: g Column: 24
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 6677832. Ξ. Submitted (05-MAR-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, BC025044 604 bp mRNA linear ROD 29-JUN-2 Mus musculus S100 calcium binding protein A10 (calpactin), mRNA (cDNA clone MGC:36182 IMAGE:4949465), complete cds. Center code: BCM-HGSC
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Loulseged,
Kowis, C.R., Sneed, A.J., Martin, R.G., Muzny, D.M., Nanavati,
A.N., Gibbs, R.A. NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
DNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genome
Sequencing Center . Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)

ı,

```
PAT 11-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                     304 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                             GGAACTAAAAAAGAACTTTATTTTTTTGAGG--CAAGGGATGCAAACAATACAAAATCAA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCNNACTTTGCCATCTCTACACTGG 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITIGCITAAGIGICCIGAICTGCICAIGAAAICCTICIATGGGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                    61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ishikawa, K., Asai, S., Takahashi, Y., Nagata, T. and Ishii, Y. Method for examining ischemic conditions
Patent: WO 0188188-A 919 22-NOV-2001;
School Juridical Person Nihon University (JP)
                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23;
                                                                                                                                                                                                                    Length 365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 600;
                                    osteoarthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                    Score 344.8; DB 6;
Pred. No. 4.8e-63;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 28.7%; Score 343.6; DB 6; Best Local Similarity 79.6%; Pred. No. 9.2e-63; Matches 476; Conservative 0; Mismatches 99;
             Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osi
Patent: WO 02000737-A 51172 12-SEP-2002
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    .600
    /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX306168 600 bp
Sequence 919 from Patent WO0188188.
AX306168
                                                                                      Location/Qualifiers
1. .365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX306168.1 GI:17645451
                                                                                                                                                                                                                  Query Match 28.8%;
Best Local Similarity 98.4%;
Matches 358; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                               362
                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 31
AX306168/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
               AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                   /translation="MPSQMEHAMETMMLTFHRFAGDKDHLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLTIACNDYFVVNMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                        511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GIGAGCCCCGCCACTAGTAGAAAGCTCTGGAAGCCCACTTTGCCATCTCGGCACTGG 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGCGAGGATCCTTTTGATTTTCCAAAAACCCA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTGGTAT----TTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGA--ACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCCGTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTGGTCTTTGTCGCCT 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATTCCTCAAGTGACCCCGTGGGTGAACACGCACCAGGGTGGGGGTACCAGTGCTCCAG 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Memo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                   7 AAAAAAGAACTITATITGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                          450 CACATTTCCTAAGGGTCCTGATCTGCTCACAA------GAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAAACCTGTGAAACGTAAGCATCATGGTTTCCATGGCGTCCTCCATTTGGGATGGCATT
                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                 22;
                                                                                                                                                                                                                                                                                                              Length 604;
                                                                                                                                             protein A10"
                                                                                                                                                                                                                                                                                                            Score 348.8; DB 10; Length
Pred. No. 7.1e-64;
0; Mismatches 92; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGA 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /going tart=1
/product="S100 calcium binding pr
/procein id="AB15044.1"
/db_xref="G1:19263550"
/db_xref="LocueID:20194"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CQ706246 365 bp DNA Sequence 51172 from Patent WO02070737. CQ706246
             /gene="S100a10"
/note="synonym: p11"
/db_xref="LocusID:20194"
                                                                 'db_xref="MGI:1339468"
                                                                                                       /gene="S100a10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CQ706246.1 GI:42267015
                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 80.3%;
Matches 466; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                        570
                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CQ706246/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 30
                                                                                      CDS
```

셤

ò 셤 8

셤 ò g ∂

ે

ò g ò a ò g 셤

g

ò 용

δ

ŝ

음

8 6 8 6

```
/translation="MPSQMEHAMETMMLTFHRFAGDKDHLTKEDLRVLMEREFPGFLE NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLTIACNDYFVVNMKQKGKK" upstream of Ncol site; chromosome 3.
                                                                                                                                                                                                                                                                                                                     ů,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                          532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    186 GGAACTCCCGTTCCATGAGCACTCTCAGGTCCTTCTTGTCAGTGTTTTGTCGCCTG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 531 CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246 CCAGGICCTICATTATTTGTCCACAGCCAGAGGATCCTTTTGATTTTCCAAAAACCCAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             471 CACATTICCTAAGGGTCCTGATCTGCTCACAA------GAAGCAGTGGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      591 AAAAAGGACTTTCTTTATTGAGGGCAATGGGATGCAAACAATATAAAACTCAGAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67 ATCTGGTAT----TTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGAGCGAACTGCTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 306 TGAGCCCCGCCACTAGTAGAAAGCTCTGGAAGCCCACTTTGCCATCTCGGCACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            422 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   482 CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCC
                                                                                                                                                                                                                                                                                                                                                                         7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542 TGGTGTGGTCCGTTGAAGCCTTGG--CCGAGGCGCGCGGACGCTGGCCGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23;
                                                                                                                                                                                                                                                                    600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 56053 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                    DB 10;
                                                                                                                                                                                                                                                                                                                     66
                                                                                                                                                                                                                                                            Score 343.6; DB 1-
Pred. No. 9.2e-63;
0; Mismatches 99
  product="calpactin I lc mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             407 bp DNA Sequence 56053 from Patent WO02070737. CQ711127.1 GI:42271984
                             69. .362
/note="calpactin I light |
/codon_start=1
                                                                                                       /protein_id="AAA37363.1"
/db_xref="G1:309134"
                                                                                                                                                                                                                                                               tch 28.7%;
al Similarity 79.6%;
476; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                 ф
                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 33
CQ711127/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PEATURES
                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse calpactin I light chain (p11) mRNA linear ROD 12-JUN-1993
M16465 J02779
M16465.1 G1:192360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 600)
Saris, C.J., Kristensen, T., D'Eustachio, P., Hicks, L.J., Noonan, D.J., CDNA sequence and tissue distribution of the mRNA for bovine and murine pl1, the S100-related light chain of the protein-tyrosine kinase substrate p36 (calpactin I)
3. Biol. Chem. 262 (22), 10663-10671 (1987)
                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGGTCCTTCATTATTTTTGTCCACAGCCAGAGGATCCTTTTGATTTTCCAAAAACCCAG 187
                                                                                                                                  CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG 472
                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                              AGATTCCTCAAGTGACCCCGTGGTGAACACGCACCAGGGTGGGGGTACCAGTGCTCCAGT 367
                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGICCTICATITITGICCACAGCCAGAGGGICTTTTTGATTTTCCAAAAATCCAG 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Original source text: Mouse fibroblast (ANN-1), cDNA to mRNA. Draft entry and clean copy sequence for [1] kindly provided by B.F.Tack, 20-UUL-1987.
Calpactin I light chain mRNA levels are low in liver, heart and testes, moderate in brain, spleen and thymus, and high in kidney, intestine and lung. A polyadenylation signal is located at positions 572-577.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAAGGACTTTCTTTATTGAGGGCAATGGGATGCAAAACAATATAAAACTCAGAAGCTT
                                                                                                                                                                                                                                            ------GAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                          AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                 CAAACCTGTGAAACGTAAGCATCATGGTTTTCCATGGCGTGCTCCATTTGGGATGGCATTT
                                                                                                                                                                                   TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTTCTATGGGGGAAGCTGTGGGGGC
regreregrecerreaaecerres - ecsassessessesses es resesses es reses es reseau es reses es reses es reses es reses es reses es reses es reseau es reses es reses es reses es reses es reses es reses es reseau es reses es reses es reses es reses es reses es reseau es reses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  M16465.1 GT:192360
calpactin I light chain; protein kinase; tyrosine kinase.
Mus musculus (house mouse)
                                                                                                                                                                                                                                       cacatricciaagggiccigarcigcicacaa----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .600
/organism="Mus musculus"
/mol_type="mRNA"
/db_tref="taxon:10090"
1. .600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
                             591
                                                                              67
                                                                                                                                  531
                                                                                                                                                                                                                                       471
                                                                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                                                                              426
                                                                                                                                                                                                                                                                                                                                                                                                 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 32
MUSCALPI/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
```

8 % a

à g

ò 9

g &

ద ò

\$ B \$

472

g

ઠે ద 8 8 è

ద ò g ઠે ရ

a ò

us-10-735-577-16.rge

```
Direct Submission

Direct Submission

Direct Submission

Burited (03-NOV-1998) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

Essearch, 320 Charles Street, Cambridge, MA 02141, USA

Birren, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baker, J., Baldwin, J., Barna, N., Cellymore, A., Collymore, A., Cooke, P., Dearellano, K., Depayre, E., Devon K., Dewar, K., Donelan, L., Doyle, M., Ferreira, P., FitzHugh, M., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Gilbert, D., Grant, G., Hagos, B., Heaford, A., Horton, L., Howland, J., Jones, C., Kann, L., Karatas, A., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKrew, J., Mychaleckyj, J., Niloff, M., O'Connor, T., O'Donnell, P., Pavilin, B., Peterson, K., Pollara, V., Riley, R., Roberts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Torruella-Miller, I., Vassiliev, H., Vo, A., Wagner, A., Direct Submission

Submitted (02-FEB-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

Research, Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baker, J., Balmin, J., Brown, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dipublished

Seliten, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baker, J., Baldwin, J., Barna, N., Beckerly, R., Benn, J., Boutwell, C., Badewin, J., Barna, N., Beckerly, R., Benn, J., Boutwell, C., Brown, A., Castle, A., Cerny, J., Colangelo, M., Collins, S., Collymore, A., Cooke, P., Corliss, D., Depayre, E., Devon, K., Dewar, K., Donelan, L., Ferreira, P., Fitzhugh, W., Forrest, C., Funke, R., Gage, D., Gardyna, S., Geraigey, K., Grant, G., Hagos, B., Heaford, A., Herena, L., Howland, J.C., Jacotot, L., Jones, C., Kann, L., Karatas, A., Lehoczky, J., Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKernan, K., Meldrim, J., Molla, M., Morris, W., O'Connor, T., O'Donnell, P., Pavlin, B., Peterson, K., Riley, R., Roberts, D., Stone, C., Subramanian, A., Tesfaye, S., Tichovolsky, N., Torruella-Miller, I., Ve, W., Wagner, A., Wheeler, J., Wuyr., Wyman, D., Ye, W.J., Zhao, J. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC005921 164679 bp DNA linear PRI 03-JUN-1999
Homo sapiens chromosome 17, clone hRPK.294_J_22, complete sequence.
AC005921
                                                                                                                                                           159 TACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCA 100
                                                                                                                                                                                                                                                             99 AAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Sases 1 to 164679)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo sapiens chromosome 17, clone hRPR.294_0_22
                                           219 ATGCAATGGTGAGCCCCCAATTAGGGAAAAGAAGCTCGGGAAGCCCCACTTTGCCATCTC
     ATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGGAAGCCCACTTTGCCATCTC
                                                                                                       TACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCA
                                                                                                                                                                                                                                                                                                                TATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT 511
                                                                                                                                                                                                                                                                                                                                            TATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC005921.3 GI:4982556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished
     293
                                                                                                       353
                                                                                                                                                                                                            413
                                                                                                                                                                                                                                                                                                                473
                                                                                                                                                                                                                                                                                                                                                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AC005921
LOCUS
                                      g
                                                                                                                                             셤
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                       8
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 03-FEB-2004
                                                                                                                                                                                                                                                                  107 AACTAAAAAGAACTTTATTTATTTGAGGGCAAGGGGATGCAAACCAAATACAAAATCAA 348
                                                                                                                                                                                                                                                                                                                                      61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATICCTTAAGCGACCCTTIGGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGTGGGGCAGATTCCTTAAGCGACCATTTGGGACAACTCTTATCAGGGAGGAGCGAAC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             279 IGCTCATTICTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGC 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            287 TTTACATTIGCTAAGIGICCTGATCIGCTCAIGAAAICCTICTAIGGGGGAAGCTGIGGG 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTCATTICTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAATAGTCATTGC 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGG-AAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGGAAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                 3 AACTAAAAAAGAACTITATITATTGAGGGCAAGGGGATGCAAAAC--AATACAAAAATCAA
                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                      4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6; Length 339;
                                                                                                                             28.6%; Score 343; DB 6; Length 407; 98.7%; Pred. No. 1.2e-62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 16039 12-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 337.4; DB 6,
Pred. No. 1.8e-61;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       339 bp DNA Sequence 16039 from Patent WO02070737.
                                                                                                                                                                                0; Mismatches
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCA-GGTCCTTCATTATTT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GICCAGGGICCTICATTANTIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CQ671113.1 GI:42164059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

28.1%;

Best Local Similarity 99.7%;

Matches 338; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                Matches 377; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CQ671113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233
                                                                                                                                                                                                                                                                                                                                                                                          347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173
                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       47
                                                                                                                             Query Match
                                                                                                                                                           Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 34
CQ671113/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
```

유 ò 임

ઠ

```
repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                            repeat_region
                                                                                                                                                   repeat_region
                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                               Direct Submission

Direct Submission

Direct Submission

Submitted (13-APR-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

E (bases 1 to 164679)

E (bases 1 to 164679)

Baren, B. Linton, L., Barna, M., Beckerly, R., Benn, J., Brown, A., Castle, A., Cerny, J., Calangelo, M., Collins, S., Collymore, A., Conke, P., Dearellano, K., Depayre, E., Devon, K., Dewar, K., Donelan, L., Doyle, M., Ferreira, P., Fitzhugh, W., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Gilbert, D., Grant, G., Hagos, B., Hedford, A., Horton, L., Howland, J.C., Jones, C., Kann, L., Karates, A., Lehoczky, J., Lehoczky, J., Lehoczky, J., McKernan, K., McLaughlin, J., Marquis, N., McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Marduis, N., Mornie, W., Morris, W., Morrow, J., Mychaleckyj, J., Naylor, J., Niloff, M., O'Connor, T., O'Donnell, P., Pavlin, B., Peterson, K., Pollaraw, V., Rilay, R., Roberts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Tesfaye, S., Torruella-Miller, I., Vassiliev, H., Vo, A., Wagner, A., Wheeler, J., Wu, X., Wu, X., Wu, X., Wann, L., Ye, W., and Zody, M., A., Magner, A., Direct Submission
Castle, A., Cerny, J., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Depayre, E., Devon, K., Dewar, K., Donelan, L., Doyle, M., Perreits, P., Fitzhugh, W., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Gilbert, D., Grant, G., Karates, B., Heaford, A., Horton, L., Howland, J. C., Jones, C., Kann, L., Karates, A., Lehoczky, J., Lieu, C., Locke, K., McLaughlin, J., Marquis, N., McBwan, P., McGurk, A., McKernan, K., McLaughlin, J., Meldrim, J., Molla, M., Morris, W., Morrow, J., Mychaleckyj, J., Naylor, J., Niloff, M., O'Connor, T., O'Donnell, P., Pavlin, B., Peterson, K., Pollara, V., Riley, R., Roberts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Tesfaye, S., Torruella-Miller, I., Vassiliev, H., Vo, A., Wagner, A., Wheeler, J., Wux, Myman, D., Ye, W.J. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Only the last 164679 base pairs of this clone are being submitted. The remainder overlaps accession number AC004590 (WICGR project L314).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (03-JUN-1999) Whitehead Institute/MIT Center for Genome Research, 3.20 Charles Street, Cambridge, MA 02141, USA On Jun 3, 1999 this sequence version replaced gi:4582484. All repeats were identified using RepeatMasker: Smit, A.F.A. &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="hRPK.294_J_22"
/clone_lib="RPCI-11 human BAC library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .164679
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chTomosome="17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (3209. 3496)
/rpt family="AluJo"
complement (3506. 3797)
/rpt_family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /rpt_family="LiMB2"
4416. .4699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     complement (3859. .4122)
/rpt_family="L2"
complement (4354. .4415)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            omplement (3018. .3085) rpt family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="L2"
complement(199...353)
/rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rpt_family="CT-rich"
063. .2209
rpt_family="C-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                354. . 645
/rpt_family="AluJo"
1999. . 2142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
```

```
/rpt_family="MER33"
19153. 10186
/rpt_family="MIR"
1922I. 19264
/rpt_family="CT-rich"
19330. 19620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_family="Alusg"
|/so4. i5234
|rpt_family="L2"
|complement(15533. i5697)
|/rpt_family="MER45"
|/complement(15533. i5697)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_family="Alusx"
21934. .21970
                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_family="AluSx"
complement(12758. ,12815)
/rpt_family="MER5A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /rpt_family="MER5A"
12816. .12981
/rpt_family="MER5A"
complement(13422. .13798)
                                                                                                                                                                                                         /rpt_family="(TTTC)n"
complement(7496. 7777)
/rpt_family="Alusc"
complement(7896. 8002)
/rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt_family="AluJo/FRAM"
complement(18420. .18615)
/rpt_family="MIR"
                                                                      family="Alusx"
ement (Fara
                                                                                                                                /rpt_family="L1MB2"
5994. .6301
/rpt_family="mido. 4884)
complement(4700. 4884)
/rpt_family="LiMB2"
5118)
                                                                                          /rpt_family="Alusx"
complement (5438. .5651)
/rpt_family="MSTC"
complement (5653. .5838)
                                             complement (4888. .5118) /rpt_family="MSTC"
                                                                                                                                                                                                                                                                                      complement (8215. .8513)
                                                                                                                                                                                                                                                                                                      /rpt_family="AluSg"
complement(8522..8576)
/rpt_family="MIR"
10158..10261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                family="(CAAAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt_famlly-
22172. .22333
/rpt_family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16340. .16636
/rpt_family="AluJo"
16638. .16707
                                                                                                                                                                                /rpt_family="AluSx"
7317. .7495
                                                                                                                                                                                                                                                                                                                                                                                            /rpt_family="AluSx"
12057. .12353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .22141
family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="Alusx"
22344. .22615
/rpt_family="Alusx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            family="AluY"
                                                                                                                                                                                                                                                                                                                                                              /rpt_family="MIR"
complement(10325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rpt_family="MIR"
2021. .22141
                                                                         complement (5119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rpt_family="L2"
6340. .16636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rpt_family="L2"
3828. .14208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'rpt_family="L2"
4209. .14503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt_family="MIR"
complement(18849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="Alu"
complement(21369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .18848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rpt_ta
.8748.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_fa
22142.
```

g

ઠે g õ 셤 ઠે 8 Š g

요 ઠ ď

ઠે

g

ò 셤 δ

8

a

ò

```
4
                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-JUL-2003
                                                                                                                                                      271
                                                                                                       158
                                                                                                                                                                                                          218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                              211
                                                                                                                                                                                                                                                                                                                                          210 AGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTAC 151
                                                                                                                                                                                                                                                                                                               219 AGGGAGGGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTAC 278
                                                                                                                                                                                                                                                                                                                                                                                                                       279 AAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCC 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OS Rattus 807. (rat)
PN JP 2002530104-A/34
PN JP 2002530104-A/34
PN JP 2002530104-A/34
PP 17-SFB-2002
PF 19-NOV-1999 US 60/109333,25-NOV-1999 US 60/110033 PR 30-NOV-1999 US 60/110277,23-AR-1999 US 09/286731 PR 09-UUL-1999 US 09/350874 PR 21-SFB-1999 US 09/350874 PR 21-SFB-1999 US 09/350874 PR C12NETH RHODES, MARIA BETTY, HUAI PING LING, WENQIAN AN PC C12NE5/09, AG1831/711, AG1838/00, AG1845/00, AG1825/08, PC AG1826/08,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P43/00, C07K14/47, C07K16/18, C12N5/10, C12P21/02, C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PR
                                                                                                                                     330 CAAATGAGAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATC
                                                                                                                                                                                                                                                              270 CTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACACACTCTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATC
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rhodes,K., Betty,M., Ling,H.P. and An,W.
Potassium channel interactors and uses therefor
Patent: JP 202530104-A 34 17-SEP-2002;
MILLENNIUM PHARMACEUTICALS INC,AMERICAN HOME PRODUCTS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 CC
Key
                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PC G01N33/53,G01N33/566,C12N15/00,C12N5/00,A61K37/02
Potassium channel interactors and uses therefor FH Ke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 600;
  Length 330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Potassium channel interactors and uses therefor. BD251901 GI:33061671 Pp. 2002530104-A/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 27.5%; Score 329.8; DB 6; Best Local Similarity 77.8%; Pred. No. 8e-60; Matches 458; Conservative 0; Mismatches 107;
27.5%; Score 330; DB 6; I
llarity 100.0%; Pred. No. 6.8e-60;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTGATTTTCCAAAATCCAGGGAACTC 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTTGATTTTCCAAAATCCAGGGAACTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (52). .(336)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Rattus sp."
/mol_type="genomic DNA"
/db xref="taxon:10118"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
FT CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 600)
Query Match
Best Local Similarity
Matches 330; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus sp.
Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G01N33/53
                                                                                                       66
                                                                                                                                                                                                            159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 37
BD251901/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                       ò
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                      130543 AAAAAGGATGTGTCAATTGAGGCCAAGAGGATGCAAACCAATCCAAAGGACCAAAAGGCCTAT 130602
                                                                                                                                                                                                                                                                                                                                                                                              130719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATAGCGACTCTTTGGGAGAACTCTCACAGGGCTG--AGTAATTGCTTAGTTCTGCCTG 130777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTCCCATGAGTACTTTCAGGCCCTCCTTCATTAAGTAGCCTTTATCCCCGGCAAATCT 131017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAAACGTAAACAACACGGTTTCCATGGTGTTCCATTGGACTGGGGTTGTTCGTGAG 131077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130603 TATTTAATTAAC-TTCCTTTCTTTGCTTGTTAGATGAGATTTGGATTTGATGTGTCTGTT 130661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCATTGTTATGTCTGCAGCCAGAGGGTCTTTTTGATTCTCCAAAAATCCAAGGAACTC 130957
                                                                                 4
                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                        130662 TTCT--TGGCCCTGGTCTGCTCATGAAAGCCTTCTACAGGGGAAGCTGTGGGGCAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCGTTCCCTTCTGCTTCATAGGTACTACAAAATAGTTGTTGTTGTTGTCCACAGTGGTGAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCATTATTTTGTCCACAGCGGGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                  CTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATT
                                                                                                                                                                                                                                                                                                                                          TGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCCAGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         549 GICCGTIGAAGCCTTGGC---CGAGGCGCGGCGGACGCTGGGCGAGCTGGCCGAGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTAT
                                                                               Gaps
                              Length 164679;
                                                                               .
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737A 56710 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                        Score 330.8; DB 9; Length
Pred. No. 9.1e-60;
0; Mismatches 142; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CQ711784 330 bp DNA
Sequence 56710 from Patent WO02070737.
CQ711784 GI:42272641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .330
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131138 ¢c¢rc¢ccaaccac 131151
                        tch 27.6%;
al Similarity 75.6%;
464; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCGGGGGGGAGAG 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                           Query Match
Best Local S:
Matches 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 909
                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                          129
                                                                                                                                                                                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     131018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 36
CQ711784/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
```

QQ

8 8 8

g

ð

8 8

С S G

õ

상 유

ò g 원

ò

ద

ò

```
PAT 20-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                              182
                                                            405
                                                                                              242
                                                                                                                             349
                                                                                                                                                             302
                                                                                                                                                                                           289
                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                          229
                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                        169
                                                                                                                                                                                                                                                                                                                                                          482
                                                                                                                                                                                                                                                                                                                                                                                       109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                509 CTCTGTCATTGGATTAACTTTTCTTTCTTGGTTGGATTGGAGTTGGATGTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             405
509 CTCTGTCATTGGATTAACTTTTCTTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                         542
                                                                                                                                                                                                                                                                                                                                                                                                                                                       49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                   228 CAGGTCTTTCATTATTTTGTCCACAGGCGGGGGTCCTTTTGATTTTCCAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                               168 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATICCITAAGCGACCCITIGGGACAACICITATCAGGGAGGAGGACGAACIGCICATITC
                              123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                            ---caggaagcagregeec
                                                                                              GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                          288 GAGCCCCCCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGCCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                           108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCCTCCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              569 AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                                            363 CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG
                                                                                                                                                                                                                                                                                                                                                          GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                         483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 600)
Rhodes,K., Betty,M., Ling,H.-P. and An,W.
Potassium channel interactors and uses therefor
Patent: US 6689581-A 64 10-FEB-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 27.5%; Score 329.8; DB 6; Best Local Similarity 77.8%; Pred. No. 8e-60; Matches 458; Conservative 0; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR473726 600 bp
Sequence 64 from patent US 6689581.
AR473726
                                                      449 CACATTCCTAAGGGTCCTGATCTGCTCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .600
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR473726.1 GI:42712140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                             183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183
                                                                                                                                                                                                                          303
                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 39
AR473726/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                       g
                                                                                                                   g
                                                                                                                                                                                      요
                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                       à
                                                                                         ò
                                                                                                                                                         ò
                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122
                                                                                                                                            182
                                                                                                                                                                            405
                                                                                                                                                                                                          242
                                                                                                                                                                                                                                           349
                                                                                                                                                                                                                                                                         302
                                                                                                                                                                                                                                                                                                         289
                                                                                                                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                        229
                                                                                                                                                                                                                                                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                AAAAAAGGCTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGGTC 510
                                                                                             CAGGICITICATIATITIGICCACAGGCGGGGGTCCTTTIGATTTTCCAAAAACCCCAGG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                       TGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67 AICIGGTAI ----TIAACTITICTITICTCIGCTIGICAAAIGAGAGTIAGATITITATITI
                                                                                                                                        123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG
                                                                                                                                                                                                         AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                                                         AGATTCCTCAGTTGACCCCATGGGAGGAGGACGCATCAAGGTGTGGGTACCAGGGC---T
                                                                                                                                                                                                                                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                      GAGCCCCCCCACTAGTAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                        CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
             AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAAATCAAAAGCTT
                                                                            ATCTGGTAT ---- TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483 GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , Ling,H.-P. and An,W. Is encoding potassium channel interactors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 329.8; DB 6; Length 6
Pred. No. 8e-60;
0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Incomparation (000)
Rhodes,K., Betty,M., Ling,H.-P. and An Nucleic acid molecules encoding potass uses therefor
Patent: US 6361971-A 64 26-MAR-2002;
Location/Qualifiers
1. 600
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600 bp
US 6361971.
                                                                                                                                                             449 CACATTTCCTAAGGGTCCTGATCTGCTCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 from patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR202142.1 GI:20256681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tch 27.5%; al Similarity 77.8%; 458; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 458; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR202142
Sequence (
AR202142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
             7
                                           569
                                                                            67
                                                                                                            509
                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                                                                      288
                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                      228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 38
AR202142/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
```

엄

ò

ò

302 289 362 229 422 109 542

49

음 δ 음 장

음 성 음

8 6

g

ઠ

8 8

```
PAT 06-JUN-2002
                                                                                                                                                                                                                                  CAGGTCTTTCATTATTTTGTCCACAGCCAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               242
                                                                                                                                                                                                                                                                               GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Norway rat)
Kattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
                                                                                                                                                                   I----
                      AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                CAGGICCTICATIATITIGICCACAGCCAGAGGGICTITITIGATITICCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                   GAACTCCCTTTCCATGAGCACTCTCAGGTCCTTCTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                   GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503 CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                --CAGGAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               404 AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24;
                                                                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAG-AATCTGTTGAAACCTGGGCCCTGAGGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Castle, A.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Rattus norvegicus"
/mol_type="unassigned DNA"
/moxete="taxon:10116"
/noce="EMBL/GenBank Accession No. J03627"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'Match 27.5%; Score 329.2; DB 6; Local Similarity 78.2%; Pred. No. 1.1e-59; les 455; Conservative 0; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443 cácártroctaággarccraarcracrca------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mendrick, D., Porter, M.W., Johnson, K.R.,
Elashoff, M.R.
Molecular toxicology modeling
Patent: WO 0210453-A 1374 07-FEB-2002;
Gene Logic, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX401698 573 bp DN Sequence 1374 from Patent WO0210453. AX401698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX4,01698.1 GI:21337878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .573
                      183
                                                                                   243
                                                                                                                348
                                                                                                                                                303
                                                                                                                                                                                 288
                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                228
                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                               168
                                                                                                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                                                                                108
                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX401698/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                    8 6
                                                                                                      8
                                                                                                                                          8 6
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                       õ
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /protein id="CAD35214.1"
/db_xref="GI:21440004"
/trānslation="MPSQMEHAMETMMLTFHRFAGEKNYLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLIIACNDYFVVHMKQKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-JUN-2002
                                                                                                                  542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAACAATATAAAAACTCGAAAGGCTC 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTICCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC 405
AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 349
                                               GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                              CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                 228 CAGGTCTTTCATTATTTTGTCCACAGGCAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG 169
                                                                                                                                                                                                                               GAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                             CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTGGAATTGGAGTTGTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67 ATCTGGTAT----TTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata, Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae;
                                TGCCTACTTCTTTCCCTTCTGCTTCATGTTACTACAAAATAGTCATTGCAATGGT
                                                                                                                                                                                                                                                                                                               108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                            GAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT
                                                                                                                                                                                                                                                                                                                                                                591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27.5%; Score 329.8; DB 6; Length 600; llarity 77.8%; Pred. No. 8e-60; Conservative 0; Mismatches 107; Indels 24
                                                                                                                                                                                                                                                                                                                                                                                             GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rhodes, K., Betty, M., Ling, H.P. and An, W.
Potassium channel interactors and uses therefor
Patent: WO 0226984-A 64 04-APR-2002;
Millennium Pharmaceuticals, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1..600
/organism="Rattus sp."
/mol_type="unassigned DNA"
/db_xref="taxon:10118"
52..339
/note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX407293 600 bp
Sequence 64 from Patent WO0226984.
AX407293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX407293.1 GI:21440003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity
458; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus sp.
Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus.
 404
                                  243
                                                                                               303
                                                                                                                               288
                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               569
                                                                348
                                                                                                                                                                363
                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                             48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX407293/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

399

504

g

ઠે

8 6

셤

8

```
/translation="MPSQWEHAMETWMLTFHRFAGEKNYLTKEDLRVLMEREFPGFLE NOKUPLAYDKIMKOKK"
upstream of PstI site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROD 27-APR-1993
42C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Original source text: Rat adrenal pheochromocytoma nerve growth factor-induced cell line PC12, cDNA to mRNA, clone 42C.
Draft entry and computer-readable sequence for [1] kindly provided by P.Masiakowski, 04-04A-1988.

Location/Qualifiers
                                     242
                                                                                                                                                                    362
                                                                                                                                                                                                  223
                                                                                                                                                                                                                                   422
   443 CACATITICCIAAGGGTCCTGATCTGCTCA-------CAGGAAGCAGTGGGGC 399
                                                                                                                                   283
                                                                                                                                                                                                                                                                 163
                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                  162 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                  43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                     282 GAGCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                      222 CAGGTCTTTCATTATTTTGTCCACAGACAGAGGTCCTTTTGATTTTCCAAAAACCCAGG
                                   183 AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                             398 AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC---T
                                                                                                    GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                    CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                     GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                    102 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 related
                                                                                                                                                                                                                                                                                                                                                                     483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 573)
Masiakowski, P. and Shooter, E.M.
Nerve growth factor induces the genes for two proteins family of calcium-binding proteins in PC12 cells
Proc. Natl. Acad. Sci. U.S.A. 85 (4), 1277-1281 (1988) 88125019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 329.2; DB 10; Length 573;
Pred. No. 1.1e-59;
0; Mismatches 103; Indels 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 complete cds, clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                    S-100-related protein; calcium-binding protein.
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="S-100-related protein mRNA"
46. 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="S-100-related protein"
/codon start=1
/protein id="AAA42097.1"
/db_xref="G1:206828"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Rattus norvegicus"
/mol_type="mRNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat S-100 related protein mRNA, J03627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 27.5%;
Best Local Similarity 78.2%;
Matches 455; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J03627.1 GI:206827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   342249:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                đq
                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 43
RATS100RP/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                             임
                                                                                                                              g
                                                                                                                                                                                               원
                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                              g
                              ò
                                                                                                   ò
                                                                                                                                                                  8
                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /protein_id="CAD88529.1"
| Datatein=id1:29786756"
| translation="WRSQMEHRMLTFHRFAGEKNYLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLIIACNDYFVVHMKQKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 10-APR-2003
                                                                                                                    362
                                                    302
                                                                                                                                                                                     422
                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                     GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                   542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                    343
                                                                                                                                                    223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503 CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                    43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
GAGCCCCCCTAGTGATAGAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                   GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTACACTGGTC
                                                                                                                                                                                   CAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                      AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                  GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                   483 GAATTIGIGAAAIGIAAACAICAIGGITTICCAIGGCGIGITCCATTIGAGAIGGCATTIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Okuse, K., Baker, M., Poon, L., Wood, J.N. and Malik-Hall, M. Sodium channel regulators and modulators
Patent: WO 03016917-A 3 27-FEB-2003;
UNIVERSITY COLLEGE LONDON (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.5%; Score 329.2; DB 6; Length 378.2%; Pred. No. 1.1e-59; tive 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                    GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                   GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3 from Patent W003016917.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX710160.1 GI:29786755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 455;
                                                                                                                                                 282
                                                                                                                                                                                                                                                                                                                                                                                    543
                                                                                                                                                                                   363
                                                                                                                                                                                                                  222
                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                   162
                                                                                                                                                                                                                                                                                                                                                    102
                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ^
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              563
                                                   243
                                                                                                                  303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 42
AX710160/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                              임
                                                                                                                                        g
                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                  임
                                                 ò
                                                                                                               ò
                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठ
```

182 397 302

281

362

422

482

g

ઠે

6 8 6 8 6

g

6 B 6

g

8 6 ò

8 S

요 ò 요

```
PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Meagher, M.J., Xu, J. and King, G.E. Compositions and methods for therapy and diagnosis of colon cancer Patent: WO 0173027-A 86 04-0CT-2001; CORIXA CORPORATION (US)
                                                                                                                   AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                         220 CAGGTCTTTCATTATTTTGTCCACACCAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG 161
                                                                                                                                                                                                                                                                                                                                                                                                            160 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTTGTCAAGTAGTTTTTTCCCCTGC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                           483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIGICAAAIGAGAGITAGAITITIATITITACAITITGCIAAGIGICCTGAICTGCTCATGA 154
                                                                                                                                                                                                                                                                                      280 gagccccccccragrananaaacrcragaagcccacrrrrccarcragacacragar 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCCATTTGGGATGGCATTTT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                      340 ccagirgecciactrcircicarcigraciacaaaaragicarigcargcaargar
                                                                                                                                                                                                                                                                                                                                                                                          423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCT
                                                                                  ---caggaagcagreegc
                                                                                                                                                                                      GAGGCCCGCAATTAGGGAAAAGAACCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                          363 CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGA 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 26.4%; Score 317; DB 6; L
Best Local Similarity 100.0%; Pred. No. 4e-57;
Matches 317; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAG-AATCTGTTGAAACCTGGCCCTGAGGCGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX260435 318 bp
Sequence 86 from Patent WO0173027.
AX260435
                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX260435.1 GI:16509402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                    123
                                                                                                                   183
                                                                                                                                                     396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              155
                   501
                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 45
AX260435/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                    QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                 ò
                                                                         음
                                                                                                         ò
                                                                                                                                              g
                                                                                                                                                                                      ò
                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 15-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in
                                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                                                                                                          223
                                                                                                                                                                                                                                                                                                                                                                                                                            422
                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGICTITICATIATITITGICCACAGCCAGGGGTCCTITIGATITICCAAAAACCCAGG 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             561 AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAACAATATAAAACTCGAAAGCTC 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTT 122
                                 CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG 444
                                                                                                                                                     123 TACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC 182
                                                                                                                                                                                                                       AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                     AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC---T 343
                                                                                                                                                                                                                                                                                        GAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 570)
Stanton, L.W., White, R.T., Damm, D.L., Lewicki, J.A., Joly, A. and Schreiner, G.F.
Methods for detection and use of differentially expressed genes disease states
Patent: US 6709855-A 23 23-MAR-2004;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                            CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                           ATCTGGTAT - - - - TTAACTTTTCTTTCTCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATTIGIGAAAIGTAAACAICAIGGITITCCAIGGCGIGITCCAITIGAGAIGGCAITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAACAAAAATCAAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27.4%; Score 328.4; DB 6; Length larity 78.4%; Pred. No. 1.6e-59; Conservative 0; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23 from patent US 6709855.
AR489208
AR489208.1 GI:47256153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .570
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sal Similarity
453; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                  563
                                                                                                                                                                                                                                                                                                                        342
                                                                                                                                                                                                                                                                                                                                                                                          282
                                                                                                                                                                                                                                                                                                                                                                                                                                                           222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                  67
                                                                                                                   503
                                                                                                                                                                                      443
                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                       398
                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                            363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 44
AR489208/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
```

ö

258

94

214

8 ò

ઠ

us-10-735-577-16.rge

Search completed: August 18, 2005, 05:26:07 Job time : 5219 secs

```
5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2005
```

nucleic search, using sw model OM nucleic

August 17, 2005, 22:29:32 ; Search time 668 Seconds (without alignments) 10625.404 Million cell updates/sec Run on:

US-10-735-577-16 1199 Title: Perfect score:

1 ggaactaaaaaaaaacttta.......egggetteeegeeeeegg 1199 Sequence:

IDENTITY NUC Scoring table:

Gapop 10.0 , Gapext 1.0

4390206 segs, 2959870667 residues Searched:

8780412 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 8 8 8 Minimum I Maximum I

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

N_Geneseq_16Dec04:* geneseqn1980s:* Database

genesequ1996s:* genesequ2006s:* genesequ2001as:* genesequ2001bs:* genesequ2002s:* geneseqn2003cs:* geneseqn2003ds:* geneseqn2003as:* geneseqn2003bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqn2004as:* genesegn2004bs:* STIMMARTES

	Description	Adp67435 Human pl1	Adp67436 Human p11	Adg84359 Human tum	Acn37451 Tumour-as	Abx63001 Human cDN	Aac78192 Human can	Aaf75079 Human col	Aaa46679 cDNA of a	Abn95852 Gene #235	Add18599 Human dis	Adf81436 Leukaemia	Abx13104 Human cDN	Adr24986 Breast ca	Adp54125 Human PRO	Ads17592 Nucleotid	Abq55234 Human ova	Aaa46667 cDNA of a	Abk45339 cDNA enco	Aac10823 Human sec	Adk11670 Breast ca	
SOPPERALES	ID	ADP67435	ADP67436	ADQ84359	ACN37451	ABX63001	AAC78192	AAF75079	AAA46679	ABN95852	ADD18599	ADF81436	ABX13104	ADR24986	ADP54125	ADS17592	ABQ55234	AAA46667	ABK45339	AAC10823	ADK11670	
	DB	12	12	12	13	œ	٣	4	m	9	10	10	10	13	13	13	9	m	છ	m	10	
	Length DB	1199	1199	1199	1199	1124	1893	1893	649	649	649	649	649	649	649	649	663	579	571	582	530	
de	Query Match	100.0	100.0	100.0	100.0	58.7	52.9	52.9	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	49.7	46.5	44.8	43.6	43.1	
	Score	1199	1199	1199	1199	703.4	634	634	601	601	601	601	601	601	601	601	595.8	557	537	523	516.8	
	Result No.	1	0	о С	Ω	c S	9 U	C 7	ω υ	ο Ο	c 10	c 11	c 15	c 13	c 14	c 15	c 16	c 17	18	c 19	c 20	

Acc51060 Human S-1	Ach34296 Human end	Adf79487 Leukaemia	Ach25344 Human adu	Aaf75092 Human col	Aah35326 Human col	Adk11672 Breast ca	Abi99809 Mouse isc	Adk11671 Breast ca	Aaa46561 cDNA sequ	Abk72684 DNA encod	Abk63467 Rat seque	Adb58585 Toxicity-	Adb53216 Primary r	Abt42181 Toxicity	Abx13102 Rat cDNA	Adp72563 Renal tox	Aa857410 cDNA #86	Aac81810 Human S10	Ada08452 Mammalian	Ada08453 Mammalian	Adp67424 Human pl1	Adp67425 Human p11	Aai10124 Probe #57	Aba51754 Human foe
ACC51060	ACH34296	ADF79487	ACH25344	4AF75092	AAH35326	ADK11672	ABI99809	ADK11671 .	AA46561	ABK72684	ABK63467	ADB58585	ADB53216	ABT42181	ABX13102	ADP72563	ASS7410	AC81810	DA08452	ADA08453	ADP67424	ADP67425	4AI10124	ABA51754
¥ 8	9 A	10	8 8	4 A	4 A	10	6 A	10	3 A	9 9	9 9	70	10	70	10	12	4 A	3	9	9 A	12	12	4 A	4 A
2016	477	434	466	441	632	350	009	341	009	900	573	573	573	573	573	573	318	294	291	291	291	291	464	464
40.5	35.8	35.3	35.2	34.3	33.0	29.0	28.7	28.3	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	26.4	24.5	24.3	24.3	24.3	24.3	22.8	22.8
485.2	429.4	423	422	411	396.2	347.4	343.6	339.4	329.8	329.8	329.2	329.2	329.2	329.2	329.2	329.2	317	294	291	291	291	291	273.8	273.8
c 21	c 22	c 23	c 24	c 25	c 26	c 27	c 28	c 29	c 30	c 31	c 32	c 33	c 34	c 35	c 36	c 37	c 38	c 39	40	c 41	42	c 43	44	45

ALIGNMENTS

pll; pll activity modulator; plasminogen activation; cytostatic; antisense therapy; cancer; tumour; tumour growth inhibition; human; antisense; gene; ds. Human p11 antisense polynucleotide SEQ ID NO:16. ADP67435 standard; cDNA; 1199 BP. (first entry) WO2004054517-A2. 01-JUL-2004. 23-SEP-2004 ADP67435; ADP67435 RESULT

12-DEC-2003; 2003WO-US040029.

13-DEC-2002; 2002US-0433140P. (MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.

Waisman D;

WPI; 2004-487995/46.

Composition useful for inhibiting growth of tumor in patient, modulates activity of p11 protein and effects change in level of plasminogen activation by a cell.

Claim 5; SEQ ID NO 16; 140pp; English.

The present invention describes a composition (I) which modulates the activity of a pl1 protein and effects a change in the level of plasminogen activation by a cell. Also described: (1) making (M1) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein produced by the cell or clonal progeny of the cell, where the protein is involved in plasminogen activation; and (2) a

```
RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                        8
                                                                                                   셤
                                                                                                                           ò
                                                                                                                                                     셤
                                                                                                                                                                                    ò
                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                           ద
clonal cell line (II) useful in the identification of composition that
modulate pl1 activity, where the clonal cell line is obtained by (MI).

Coll has cytostatic activity, and can be used in antisense therapy. (I) is
cuseful for modulating the activity of pl1 which involves administering

(I) to a cell. The cell can be a human cancer cell, chosen from a HT1080

Ciptus accomma cell, a LNCaP prostate cancer cell and a CCL-22 colorectal
adenocarcinoma cell. (I) is also useful for reducing the development of
cancer in a patient e.g., mouse which involves administering (I) to a
cancer cell in the patient. (I) is useful for inhibiting the growth of
tumours or inhibiting tumour cell invasion in a patient, which involves
administering the composition that modulates pl1 activity which involves
condinistering the composition to (II) obtained by (MI), determining the
change in pl1 activity of a cell of the clonal cell line relative to a
cell of a clonal cell line that had not received the composition, and
change in pl1 activity is a change in the level of plasminogen activity. The
change in pl1 activity is a change in the level of plasminogen activation
activity. The present sequence represents a pl1 antisense polynucleoride,
which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTCTAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCAAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTAATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                          Length 1199;
                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                               Sequence 1199 BP; 235 A; 338 C; 337 G; 289 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                          DB 12;
                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 1199; DB 12; Best Local Similarity 100.0%; Pred. No. 3.3e-293; Matches 1199; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>ک</u> ۾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
1140
                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                         1020
                                                                                                                                                                                                                                                                                                                                                                                                                                    1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                                                                                                                                                                                                                                            960
                                      780
                                                                                 840
                                                                                                                                                                     900
                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGCCTGCGCCAGTGGAGGGGGGGCACTCCCCAGAAGCCGGGCTTCCCGGCCCCACCGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   p11; p11 activity modulator; plasminogen activation; cytostatic;
antisense therapy; cancer; tumour; tumour growth inhibition; human; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition useful for inhibiting growth of tumor in patient, modulates activity of p11 protein and effects change in level of plasminogen activation by a cell.
                    CTCCCCCAGCCCTGTCTCCTCCCCCCTCTTCCTGCCCCCCAACTCCCCCCGACCCCCGGGCGCG
                                                                                                        ATCCCCACCCTGAGCCTGCCCTTCCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                                                                                                                                                                                                                                                     ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                                                                    AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                         GAACCCGGCCGTCCTGCGGGTGGGGCACGTGGCGCAGAACCAGAGGTAACCGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a composition (I) which modulates the activity of a pl1 protein and effects a change in the level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human p11 sense polynucleotide SEQ ID NO:17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 16; SEQ ID NO 17; 140pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADP67436/c
ID ADP67436 standard; cDNA; 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-DEC-2003; 2003WO-US040029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-DEC-2002; 2002US-0433140P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-487995/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2004054517-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Waisman D;
                                      721
                                                                                                                          781
                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADP67436;
                                                                                 781
                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
721
```

```
plasminogen activation by a cell. Also described: (1) making (M1) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein produced by the cell or clonal progeny of the cell, where the protein is involved in plasminogen activation; and (2) a clonal cell line (II) useful in the identification of composition that modulate pll activity, where the clonal cell line is obtained by (M1).

(I) has cytostatic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of pll which involves administering (I) to a cell. The cell can be a human cancer cell, chosen from a H71080 ibrosarcoma cell, a LNCaP prostate cancer cell, chosen from a H71080 cancer cell in the patient. (I) is also useful for reducing the development of cancer cell in the patient. (I) is useful for inhibiting the growth of tumours or inhibiting tumour cell invasion in a patient, which involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates pli activity which involves administering the composition to (II) obtained by (M1), determining the change in pl1 activity of a cell of the clonal cell line relative to a cancer that had not received the composition, and character in a patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACTAAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAAAATACAA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   identifying the composition that produces a change in pli activity. The change in pl1 activity is a change in the level of plasminogen activation activity. The present sequence represents a pl1 sense polynucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 1199; DB 12; Best Local Similarity 100.0%; Pred. No. 3.3e-293; Matches 1199; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                       OCCUPANT TO THE TERM OF THE TE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
360
                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCTTT 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 240
                                                                                                                420
                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rccaggrccrrcarrarrrrgrccacagaccagaggrcrrrrrgarrrccaaaaarcca 780
                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGACGCGGGGCGGAGAGGCGCGCGCGCGGCTGTGCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                             TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGCGGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                   719 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     629
            1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                               1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     599
                                              181
                                                                                                                241
                                                                                                                                                959
                                                                                                                                                                               301
                                                                                                                                                                                                                899
                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                               839
                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                 779
                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      501
```

8 G

8 8

g

ሪ ස ሪ

6 6 6 6 6

A S S S S S S S S S S S S S S S S S S S	661 GGGTGGGTAAAGGGAGGGGGGGGGGGAGGGAAG 539 GGGTGGGTAGAGGGAGGGGGGGGGAAGGGGAAG 721 CTCCCCCAGCCCTGTCTCTCCTCCTTCTGG 730 CTCCCCAGCCCTGTTCTCTCCTCCTTCTTCTGG 740 CTCCCCAGCCCTGTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT	0 0 0
X	human; tumour-associated antigenic target; TAT; cytostatic; gene therapy; cancer; cell proliferative disorder; gene; ss. Homo sapiens. W02004060270-A2. 22-JUL-2004. 15-OCT-2003; 2003WO-US029126. 18-OCT-2002; 2002US-0418988P. (GETH) GENENTECH INC. (WUTD/) WU T D. (ZHOU/) ZHOU Y. Wu TD, Zhou Y; WPI; 2004-534300/51.	
TY XX	New nucleic acid molecule and encoded polypeptide, for diagnosing, preventing or treating cell proliferative disorders such as cancer. Claim 1; SEQ ID NO 1173; SSO4pp; English.	

The present invention describes an isolated tumour-associated antigenic target (frx) nucleic acid comprising: (a) any of 4622 nucleotide sequences (see SEQ ID NO.1 to 4622); (b) the full-length coding region of (a); (c) the complement of (a) or (b); (d) a sequence that has 80% eaquence identity to (a) -(c); or (e) a sequence that hybridises to (a) -(c). Also described: (1) an expression vector comprising the above nucleic acid; (2) a host cell comprising the above expression vector; (3) a process for producing a polypeptide; (4) an isolated polypeptide or comprising: (a) an animo acid sequence encoded by the full-comprising the above polypeptide; (b) an animo acid sequence encoded by the full-comprising the above polypeptide (a); (5) a chimaric polypeptide (c) arising the above polypeptide (b); (5) a chimaric polypeptide; (6) an isolated antibody that binds to the above polypeptide; (6) a comprising the above polypeptide; (9) a tumour-associated antigenic target (TAT) and acided antibody, oligopeptide (b) a tumour-associated antigenic target (TAT) composition of matter comprising the above polypeptide; (10) a composition of matter contained within the container; (12) methods of the composition of matter comprising the above polypeptide; (12) methods of the growth of the cell is at least in part dependent upon a growth of the cell is at least in part dependent upon a growth of the cell is at least in part dependent upon a growth of the cell is at least in part dependent upon a growth of the above protein; (14) a method of determining the protein of described above; (15) method of diagnosition of aciding or preventing a container; (15) containing the protein in a sample suppected of containing the protein; and (17) a method of diagnosity the presence of a protein in a sample suppected of containing the protein; and (17) a method of binding an antibody, oligopeptide of a containing the presence of a protein and method for a cell that expresses the presence of a protein and encoded the apprendiction of aciding or p The composition is also used for preparing cancer. The present sequence represents a preventing or treating cancer. The composition is also used to preventing or treating cancer. The medicament for the therapeutic treatment or diagnostic detection human TAT cDNA sequence from the present invention. proliferative disorder or

Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;

1020 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT 1080 900 780 180 240 960 300 360 840 420 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTATT TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT GTGAGGCCCGCAATTAGGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA Gaps Length 1199; ö Indels 100.0%; Score 1199; DB 12; 100.0%; Pred. No. 3.3e-293; iive 0; Mismatches 0; Query Match 100. Best Local Similarity 100. Matches 1199; Conservative 1199 1139 1079 181 1019 61 121 959 899 839 241 301 361 g 셤 g g ò 8 6 ⋧ ò 요 ò ò

1080 1140 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAAACCAGAGGTAACCGGCTCTGC 1020 480 99 009 009 099 720 480 840 300 960 240 180 540 780 420 360 900 179 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 120 1141 CGGCCTGCGCCAGTGGAGGGCGGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGC 1199 9 779 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGGAGCCTTTATGTCCCCA GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT TTGGTGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGCGGACGCTGGGCGAAGCTGGGCGAG 659 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAAG 359 AGAGGGTTCTTGTAAACTTCTTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC ATCCCCACCCTGAGCCTGCCCTTCCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 119 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG GGGTGGGTAGAGGGGGGGGGGGGGAGCGGGAGGAGCCTGGCGGGGGCGCTCGGCAGGGCG crececeadecergrerecrecererrecrececedascrecedascedede ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA 239 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC <u> CGGCCTGCGCCAGTGGAGGGGCGCCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG</u> 539 (479 961 1021 1081 59 541 299 841 299 481 601 199 781 901 421 721 엄 g 엄 g ò g g 염 유 셤 g 9 ઠે ò 8 8 ò ò ò ò ò 8 ð

ACN37451/c ID ACN37451 standard; cDNA; 1199 18-NOV-2004 ACN37451; RESULT 4

Tumour-associated antigenic target; TAT; human; overexpression; cancer; tumour; diagnosis; cell proliferative disorder; breast cancer; colorectal cancer; lung cancer; ovarian cancer; liver cancer; central nervous system cancer; bladder cancer; pancreatic cancer; cervical cancer; melanoma; leukaemia; hybridisation probe; chromosome identification; chromosome mapping; gene mapping; Tumour-associated antigenic target (TAT) cDNA DNA323900, SEQ ID NO:342 gene therapy; cytostatic; gene; ss.

sapiens

Ношо

S

```
TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     239 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGAAACCAGAGGTAACCGGCTCTGC 180
420
                                                                             480
                                                                                                                 720
                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTACAAATCAAA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                           909
                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGCCTGCGCCAGTGGAGGGGGGGGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; gene; ss; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                     rccaggrccircarrarrigiccacaggccagagggrcrrrrgarrirccaaaaarcca
                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                TTGGTGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGTGGGTAGAGGGGGGGGGGGGGGGGGGGGGGGGGGCCTGGCGGGGGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCCCCAGCCCTGTCTCCTCCTCCTGCCCCCCGACTCCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCCCCACGCCCTGCCCTCGCTCCCCGGACCCGCCTCGCAGAGGCCTCGCCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTATCGACCTCAGAGGGACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGGTCTCGG
                                                                                                                                                                                GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                              GGGTGGGTAGAGGGGGGGGGGGGGGGGGGGGGGGCCTGGCGGGGCGCTCGGCAGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCCCCAGCCCTGTCTCCTCCCCCTCTTCCTGCCCCCCGACTCCCCCGACCCCCGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                           CTGGACGCGGGGGGGAGGCGCGCGCGCGGGCTGTGCGCCTTTCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCACCCTGAGCCTGCCCTTCCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGCCTGCGCCAGTGGAGGGGGGGCACTCCCCAGAAGCCGGGCTTCCCGCCCCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cDNA #1 differentially expressed in activated vascular tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABX63001 standard; cDNA; 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-FEB-2003
                                     839
                                                                                                                 179
                                                                                                                                                         481
                                                                                                                                                                                                   719
                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                 629
                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
361
                                                                             421
                                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX63001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                           g
                                                                                                         Q
                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                           ò
                                                                                                                                                       8
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٠ ج
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to human tumour-associated antigenic target (TAT) polypeptides, and their related nucleic acids. The TAT polypeptides are overexpressed in cancer tissues compared to normal tissues, and may thus serve as effective targets for the diagnosis and treatment of cancer in mammals. The invention also relates to nucleic acid and polypeptide sequences at least 80% identical to the TAT nucleic acids and polypeptides; expression vectors and host cells comprising a TAT nucleic acids and antibody specific for a TAT polypeptide; a peptide or organic acid; an antibody specific for a TAT polypeptide; fusion proteins comprising a TAT polypeptide; and methods and compositions for the treatment or diagnosis of cancer in mammals. TAT polypeptides, nucleic acids, antigonists, binding molecules and compositions are useful for diagnosing or treating a cell proliferative disorder associated with increased TAT expression, particularly cancers such as breast cancer, colorectal cancer, lung cancer, ovarian cancer, lust cancer, bladder cancer, particularly cancers of the central nervous system, melanoma and leukaemia. TAT nucleic acids may further be used as hybridisation probes, in chromosome and gene mapping, in chromosome identification and in gene therapy. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITIACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACCACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                New tumor-associated antigenic target polypeptides and nucleic acids, useful in preparing a medicament for treating or detecting a proliferative disorder, e.g. breast, lung, colorectal, ovarian or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 1199; DB 13;
100.0%; Pred. No. 3.3e-293;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 342; 7273pp; English
                                                                         29-SEP-2003; 2003WO-US028547
                                                                                                               02-OCT-2002; 2002US-0414971P
                                                                                                                                                                                                                                                                                                                                                                 prostate cancer or tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 1199; Conservative
                                                                                                                                                                                               Zhou
                                                                                                                                                         (GETH ) GENENTECH INC
                                                                                                                                                                                                                                       2004-347921/32.
                                                                                                                                                                                                 Zhang Z,
                                                                                                                                                                                                                                                            P-PSDB; ABM80135
                                 15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                899
```

8 8

ઠ 8 ð g ద δ

જે

8

φ

494

434

420

374

480

254

314

540

194 591 134 651 711

```
diagnosis; cytostatic; proliferative; vulnerary; immunomodulator; antidiabetic; antiasthmatic; antirheumatic; antiarthritic; antiviral; antidiametic; antiarthritic; antiviral; dermatological; neuroprotective; thrombolyvic; coagulant; noctropic; vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation; immune disorder; haematopoletic cell disorder; autoimmune disorder; haematopoletic cell disorder; autoimmune disorder; haematopoletic call disorder; autoimmune disorder; haematopoletic call disorder; autoimmune disorder; nerus TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                      253 GCGAATTTGTGAAATGTAAACATCGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                               rccaggrccrrcarrarrrrgrccacaggccagaggrcrrrrrgarrrccaaaaarcca
                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 ACGTGCGGCGGGTGGGTAGAGGGAGGCGGTGCGGGAGCGGGAGGAGCCTGGCGGCGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer associated gene; cancer antigen; detection; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human cancer associated gene sequence SEQ ID NO:586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC78192 standard; cDNA; 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0124270P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-2000; 2000WO-US005882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 GGCAGGGCGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712 GGCAGGGCGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200055350-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-SEP-2000
                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                592
                               553
                                                                           241
                                                                                                                                                                        301
                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC78192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                     g
                                                                                                                                                                        ð
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed companies. The cDNAs of the invention may have antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; cynascological; vasotropic and cerebroprotective activities and may be used in gene therapy. The CDNAs of the invention may be used in a high-throughput methods for detecting differential expression of one or more consention. A protein encoded by the cDNA may be used to screen several contentify a molecule or compound that specifically binds a consent of invention. A protein encoded by the CDNA may be used to screen several contenties or compounds to identify a ligand that specifically binds to the protein, or to produce or purify an antibody to the protein that can be used to detect a protein in a sample. The nucleotides may be useful for the bused to detect a protein in a sample. The nucleotides may be useful for cidagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atheroscalenosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischaemia reperfusion in july, restenosis, or stroke. The cDNAs can also be used for large-scale consecuted with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNA of the invention of the protein. The present sequence represents a cDNA of the invention that is differentially expressed in activated vascular tissue. Note: The content of the specification, but the content of the specification, but we content of the specification, but we content of the protein of the protein and directly from usprop at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                             Combination for diagnosing, stading, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 8; Length 1124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1124 BP; 320 A; 286 C; 261 G; 254 T; 0 U; 3 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           http.seqdata.uspto.gov/sequence.html?DocID=20020137081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 703.4; DB 8;
Pred. No. 1.1e-167;
0; Mismatches 1;
                                                                                                                                                                                                                28-JUL-2000; 2000US-0222469P.
08-JAN-2001; 2001US-0260483P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58.7%;
98.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page; 18pp; English.
                                                                                                                                                                      38-JAN-2002; 2002US-00044090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               723; Conservative
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-110597/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                    (BAND/) BANDMAN O.
                                                                         US2002137081-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vascular tissue
                             sapiens
                                                                                                                       26-SEP-2002
                                                                                                                                                                                                                                                                                                                                     Bandman O;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local 8
                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Simi
hes 634;
                                                                                                                                                   1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1836
                           541
                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                       RESULT 7
                                                                                                                                          셤
                                                    g
                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                       AAC77607 to AAC78448 encode the human cancer associated proteins given in AAB43398 to AAB44239. The proteins can have activities based on the tissues and cells the genes are expressed in. Example of activities inclaimatory; antiasthmatic; antiarthritic; antiathritic; and antiathritic; and antiathritic; and antiathritic; and polymetering and polypeptides can be used for preventing, treating or anallorating medical conditions and diagnosing pathological conditions. Polymucleotides, polypeptides, antibodies, agonists and antagonists from the present invention may be used to treat immune disorders by activating the present invention may be used to treat immune disorders by activating immune cells, to treat disorders of haematopoistic cells, autoimmune disorders, allergic reactions, gifferentiation or mobilisation of modulate haemostatic or thrombolytic activity, modulate and antagonists and antagonists and antagonists and antagonists may be used in drug screens. AAC78449 to AAC78457 and AAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTAICTGGIATTTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATTIGCTAAGIGICCTGATCIGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1656 GCAGATICCTIAAGCGACCCTITGGGACAACICTIATCAGGAGGAGGAACTGCTCATI 1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                        Novel isolated nucleic acids comprising sequences encoding peptides useful for treating or diagnosing e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1893 BP; 543 A; 466 C; 419 G; 458 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52.9%; Score 634; DB 3; Le
100.0%; Pred. No. 5.1e-150;
ive 0; Mismatches 0;
                                                                                                                                                                     Claim 1; Page 1108-1109; 2352pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 634; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention
Ruben SM;
                                           WPI; 2000-587533/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                 P-PSDB; AAB43983
ą,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local
  Rosen
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
1657
                120
900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful for preventing, diagnosing and/or treating e.g. cancers (especially colon cancer), Parkinson's disease and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to 13 human colon cancer-associated proteins. These proteins and the nucleic acid encoding them may be used in the prevention, diagnosis and treatment of diseases associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGAACTAAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acids encoding 13 human colon cancer associated polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.9%; Score 634; DB 4; Length 1893; ilarity 100.0%; Pred. No. 5.1e-150; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1893 BP; 543 A; 466 C; 419 G; 458 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inappropriate colon cancer-associated protein expression
                                                                              creaaceceaegeaaaagecaageegeege 1203
                                                     634
                                                                                                                                                                                                                                       Human colon associated protein cDNA sequence #3.
                                                     CTGGACGCGGGGGGAGAGGCGAGCGCGCGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 308-309; 326pp; English.
                                                                                                                                                                                                                                                                  Human; colon; cancer; disease; ss.
```

ω

```
AAA46668-79 represent differentially expressed human genes, associated with disease states and disorders. The specification describes methods preventing, diagnosing and treating cardiac, kidney and inflammatory diseases associated with inappropriate expression of differentially expressed cardiac, kidney and inflammatory genes (e.g. AAA6668-79). These genes include 1-8U, prostacyclin-stimulating factor, isf-2, tissue specific mRNA, insulin-like growth factor binding protein 6, OSF-1, gas-1, YMP, BTG2, pre-B cell stimulating factor homologue (SPFla), peripheral benzodiazepine receptor, and cellular ligand of annexin II (pll), respectively. These diseases include congenital heart failure, dilated congestive cardiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy, malvel disease, ancilude are action cardiac valve disease, angina pectoris, myocardial infarction, cardiac arrhythmia, pulmonary hypertension, arterial hypertension, renovascular
                                                                                                                                                                                                                                                                                                            hypertension, arteriosclerosis, atherosclerosis and/or cardiac tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481 GCGAATTTGTGAAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589 AAGCTTATCTGGTATTTAACTTTTTCTTTCTTCTGTGTAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCATGCCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               469 GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCTTT
                                                                                                                                                                                                                                                                                                                                                                                 Length 649;
                                                                                                                                                                                                                                                                                                                                               Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                               Score 601; DB 3; I
Pred. No. 7.5e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGGAGAGGCGAGC
                  Disclosure, Fig 7L; 170pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                 Query Match 50.1%;
Best Local Similarity 99.7%;
Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABN95852 standard; DNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
ABN95852/c
ID ABN9585
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     염
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                      1477
                                                                                                                                                                                                                    1357
                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 1297
                                                                                                          420
                                                                                                                                                                                480
                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypertrophic cardiomyopathy; restrictive cardiomyopathy; hypertrophic cardiomyopathy; mitral valve disease; acrtic valve disease; tricuspid valve disease; angina pectoris; myocardial infarction; cardiac arrhythmia; pulmonary hypertension; arterial hypertension; renovascular hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SDF1a;
                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTTAAGTAGCCTTTATCCCCA
                                GTGAGGCCGCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                          GTGAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                            TTGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Differentially expressed human gene; cardiac disease; kidney disease; inflammatory disease; I-BU; prostacyclin-stimulating factor; isf-2; tissue specific mRNA; insulin-like growth factor binding protein 6; OSF-1; gas-1; YMP; BTG2; pre-B cell stimulating factor homologue; SDF) peripheral benzodiazepine receptor; annexin II cellular ligand; pl1; congenital heart failure; dilated congestive cardiomyopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schreiner GF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Preventing, diagnosing and treating cardiac, kidney and inflammatory disorders using cardiac genes that are differentially expressed in disease states such as cardiac arrhythmia and arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA of a human gene encoding cellular ligand of annexin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lewickí JA, Joly A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               arteriosclerosis; atherosclerosis; cardiac tumour; ss
                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGCGGAGACGCGCGCGCGGCGGCC 1203
                                                                                                                                                                                                                                                                                                                                                                                                     634
                                                                                                                                                                                                                                                                                                                                                                                                     CTGGACGCGGGGGGAGAGGCGAGCGCGGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1476
                                                                    1536
                                                                                                                                                                                                                  1416
                                                                                                                                                                                                                                                                                        1356
                                                                                                                                                                                                                                                                                                                                                                1296
                                                                                                                                                                                                                                                                                                                                                                                                                                      1236
                                  301
                                                                                                        361
                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                              421
                                                                                                                                                                                                      8 % 8
                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                ઠે
                                                            음
상
음
                                                                                                                                                                    ò
```

7

Gaps 2; 120 530 180 470 240

590

9

300

351

411

360

291

420 231 480 171 540 111 900

σ

```
360
                                                                                                                  420
                                                                           291
                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New substantially purified polypeptide, useful for diagnosing or treating a hypoxia-regulated condition, such as cancer, ischemia, reperfusion injury, retinopathy, pre-eclampsia, atherosclerosis, inflammation, or
                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCCA 171
                                                                                                                                                                                                                                                                                                           111
                                                                                                                                                                                                                                                                                                                                                  TTGGTGTGGTCCGTTGAAGCCTTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
human; disease state; cytostatic; antiinflammatory; ophthalmological; antiarteriosclerctic; vulnerary; gene therapy; hypoxia-regulated condition; tumourigenesis; angiogenesis; apoptosis; inflammation; erythropoiesis; glycolygis; gluconeogenesis; glucose transportation; catecholamine synthesis; iron transport; nitric coxide synthesis; cancer; ischaemic condition; reperfusion injury; retinopathy; neonatal stress; pre-eclampsia; atherosclerosis; inflammatory condition; wound healing; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                         22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to novel human genes and gene product which are implicated in certain disease states. Compounds which modulate the
                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                           TIGGIGGIGGITGGITGAAGCCTIGG-CGAGGCGCGGGCGACGCTGGGCGGGGGGCGAG
                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mundy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Naylor S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human disease related protein DNA sequence SeqID30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Harris RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 27; SEQ ID NO 30; 424pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27
                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    crecacececeacadeceade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ward NR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (OXFO-) OXFORD BIOMEDICA UK LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-AUG-2001; 2001GB-00020558.
05-OCT-2001; 2001GB-00024037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-AUG-2002; 2002WO-GB003892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kingsman SM, White J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-290046/28.
P-PSDB; ADD18598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD18599 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003018621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-MAR-2003
410
                                    301
                                                                           350
                                                                                                                361
                                                                                                                                                    290
                                                                                                                                                                                           421
                                                                                                                                                                                                                                  230
                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                           170
                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                         110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADD18599;
                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
ADD18599/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                            g
                                                                                                                                                                                         ò
                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                          ò
                                                                                                   ò
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel method for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumour in a patient, and differentiating metastatic liver cancer from hepatocellular carcinoma in a patient, involving detecting the level of tissue sample. The method of the invention has hepatotropic, and cytostatic activity. The method is useful for diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma and metastatic liver carcinoma in a patient. The method is useful for identifying expression profiles which serve as useful diagnostic markers as well as markers that can be used to monitor disease states, disease progression, and to this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGGGTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACATITICCTAAGIGICCTGAICTGCTCATGAAAICCTTCTAIGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumor in a patient, involves detecting the level of expression of two or more genes in a liver tissue sample.
                                                                                                                            Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic; metastatic liver tumour; cytostatic; expression profile; disease state; disease progression; drug toxicity; drug efficacy; drug metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Vockley JG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50.1%; Score 601; DB 6; Lilarity 99.7%; Pred. No. 7.5e-142; Conservative 0; Mismatches 0;
                                                                                         #2350 used to diagnose liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peres-Da-Silva S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 2350; 298pp; English.
                                                                                                                                                                                                                                                                                                                            02-OCT-2001; 2001WO-US030589
                                                                                                                                                                                                                                                                                                                                                                    02-OCT-2000; 2000US-0237054P
                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         LOGIC INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Alvares C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-426119/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         al Similarity
623; Conserv
                                                                                                                                                                                                                                                  WO200229103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                         (GENE-) GENE
                                                                                                                                                                                                             Homo sapiens.
                                                     13-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                ABN95852;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469
                                                                                                                                                                                                                                                                                                                                                                                                                                                Horne D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                         Gene
```

셤 ઠે ద 8 g g δ

8

Cytostatic; Gene therapy; leukaemia;

WO2003039443-A2

15-MAY-2003

```
proteins of the invention may have cytostatic, antiinflammatory, ophthalmological, antiarteriosclerotic or vulnerary activities. The sequences of the invention may be useful for gene therapy. The invention may be useful for gene therapy. The invention may be useful for diagnosing or treating a hypoxia-regulated condition, such as tumourigenesis, angiogenesis, apoptosis, inflammation, erythropoiesis, or the biological response to hypoxia conditions including processes such as glycolysis, gluconeogenesis, glucose transportation, catecholamine synthesis, iron transport or nitric oxide synthesis. The disease includes cancer, ischaemic conditions, reperfusion injury, retinopathy, neonetal stress, pre-eclampsia, atherosclerosis, inflammatory conditions or wound healing. The present sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                     530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                 590
                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCGGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGGTGGTGCTTGAAGCCTTGG-CGAGGCGCGGCGGCGGACGCTGGGCCGAGCTGGGCCGAG
                                                                                                                                                                                                                                                                                                                                             GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                               GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTGTGTGTGTGTGTGTGTGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                disease related protein encoding DNA sequence of the invention.
                                                                                                                                                                                                                                                                                                          5;
                                                                                                                                                                                                                                                                         Length 649;
                                                                                                                                                                                                                                    Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                     50.1%; Score 601; DB 10; 99.7%; Pred. No. 7.5e-142;
                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                          Matches 623; Conservative
                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                    589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51
                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
   8888888888888888888
                                                                                                                                                                                                                                                                                                                                             8 6
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્જ
```

Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in

Dugas M;

Schnittger S,

Kohlmann A,

3

Eils R, Brors B, Mergenthaler S;

WPI; 2003-505037/47.

patient sample.

Schoch C,

Haferlach T,

SCHOCH C.

(KERN/)

DEUT KREBSFORSCHUNGSZENTRUM. UNIV LUDWIG MAXIMILIANS. HAFERLACH T.

(DEKR-) HAFE/) (JATE) (SCHO/)

05-NOV-2001; 2001EP-00126244 30-APR-2002; 2002EP-00009758 04-NOV-2002; 2002WO-EP012303

```
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 291
                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a method (M1) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTTGTCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 601; DB 10;
Pred. No. 7.5e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 1992; 2938pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.7%;
Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

Leukaemia-related DNA sequence #1992.

(first entry)

26-FEB-2004

649

standard; DNA;

ADF81436

RESULT 11

ADF81436

ADF81436/ ID ADF8 XX AC ADF8 XX DT 26-F XX DE Leuk

```
290
                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                          410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110
                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADR24986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADR24986/c
ID ADR24
XX
AC ADR24
  ð
                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying a voltage gated sodium channel (VGSC) modulator for producing analgesia and for relieving chronic pain, e.g. osteoarthritis or HIV pain, comprises bringing into contact a VGSC, a p11 peptide and a test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to identifying a modulator of a voltage gated sodium channel (VGSC) e.g. Navl 8 comprising: (a) bringing into contact a VGSC, a pll peptide (a small calcium binding protein of the S-100 family) and test compound (tc) so that the VGSC and the pll peptide can form a complex in the absence of the (tc); and (b) measuring an activity of the VGSC, where a change in the activity of the VGSC, relative to the activity in the absence of the (tc) indicates that the (tc) is a modulator of VGSC. Also included are a method of enhancing the functional expression of a VGSC in a cell by increasing the level of pl1 in the cell, a
                                                                                  Tregrerecerreaagecrregeceaageceaegegeseaaceragecaagerages
                                                                                                                                                                                                                                                                                                                         pain;
pain;
                     171
                                                     25
                                                                                                                                                                                                                                                                                                small calcium binding procein; analgasia; chronic pain; osteoarthritis; rheumatoid arthritis; neuropathic pain; cancer pain; tri geminal neuralgia; hyperalgesia; inflammatory pain; nociceptive pain tabes dorsalis; phantom limb pain; spinal cord injury pain; central pain post-herpetic pain; HIV pain; non-cardiac chest pain; in tritable bowel syndrome; bowel disorder.
                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                          p11;
                                                                                                                                                                                                                                                                                         gene; voltage gated sodium channel; VGSC; Navl.8;
                                                                                                                                                                                                                                                                  Human cDNA encoding small calcium binding protein pl1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Malik-Hall M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 102-103; 114pp; English
                                                                                                                            CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wood JN,
                                                                                                                                                                                                                                                                                                                                                                                             location/Qualifiers
                                                                                                                                        CTGGACGCGGGCGGAGAGCGAGC
                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "p11"
                                                                                                                                                                                            104/c
ABX13104 standard; cDNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-AUG-2002; 2002WO-GB003852.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-AUG-2001; 2001GB-00020238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Poon L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UNLO ) UNIV COLLEGE LONDON
                                                                                                                                                                                                                                                                                                                                                                                                          112. .405
/*tag= a
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Okuse K, Baker M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-278589/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-278589/;
P-PSDB; ABG76194.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003016917-A2
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                              LO-MAY-2003
                     230
                                                                                                                                                                                                                         ABX13104;
 421
                                                             170
                                                                                  541
                                                                                                       110
                                                                                                                            601
                                                                                                                                                51
                                          481
                                                                                                                                                                                                                                                                                         Human;
                                                                                                                                                                               8 6 8
                                                                                                g
ò
                                                                           8
                                                                                                                          8
                                                                                                                                          셤
```

```
compound identified by a method above, a host cell capable of expressing a VGSC and a pll peptide (where the VGSC and/or peptide ll is expressed from one or more heterologous expression vectors within the cell), treating a disorder or condition associated with the activity of a voltage gated sodium channel (by administering to an individual a compound identified by the method above, or an inhibitor of pll activity of a compound identified as medilator of VGSC are useful for manufacturing a medicament for modulating the functional expression of a voltage gated sodium channel, for producing analgesia and for relieving chronic pain such as osteoarthritis, rheumatoid arthritis, neuropathic pain, cancer pain, tri geminal neuralgia, primary and secondary hyperalgesia, inflammatory pain, nociceptive pain, tabes dorsalis, phantom limb pain, copinal cord injury pain, central pain, post-herpetic pain and HIV pain, non-cardiac chest pain, irritable bowel syndrome and pain associated with bowel disorders. The present sequence encodes human pll
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6668ACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGGGAGCGAACTGCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   recaderectreatratraterecadeceadadectratratratratecaaaaareca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGTGTGTCCGTTGAAGCCTTGGCCCGAGGCGCGGCGGACGCTGGGCGAGCTGCGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rregrererectrica Accerres - cea escece cea escene escena e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 50.1%; Score 601; DB 10; Best Local Similarity 99.7%; Pred. No. 7.5e-142; Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGCGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADR24986 standard; DNA; 649
```

```
The present invention describes an isolated PRO nucleic acid (1). Also described: (1) a vector comprising (1); (2) a host cell comprising the vector of (1); (3) a process for producing a PRO polypeptides; (4) an isolated PRO polypeptide; (5) a chimeric molecule comprising the polypeptide of (4) fused to a heterologous amino acid sequence; (6) an antibody which specifically binds to a polypeptide of (4); (7) a composition of matter comprising a polypeptide of (4), an agonist or antagonist of the polypeptide or an antibody that binds to the antagonist of the polypeptide or an antibody that binds to the confinence of an antibody that binds an article of manufacture comprising a container, a label on the container and a composition of matter of (7); (9) a method of treating an immune related disease in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRO polynucleotides and polypeptides, useful in useful in diagnosing treating an immune related disease, e.g. systemic lupus hematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; PRO; immune related disease; inflammatory immune response; immune response stimulation; antiallergic; antianaemic; antiarthritic; antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic; antithyroid; CNS; dermatological; gastrointestinal; haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular; nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic;
290 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                  421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCA
                                                         481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                           Williams PM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schoenfeld J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; SEQ ID NO 101; 3009pp; English.
                                                                                                                                                                                                                                          625
                                                                                                                                                                                                                                                                         27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PRO cDNA sequence SEQ ID NO:101.
                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                          CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virucide; gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stimulating an immune response
                                                                                                                                                                                                                                                                                                                                                             ADP54125 standard; cDNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-OCT-2003; 2003WO-US034381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-OCT-2002; 2002US-0422472P
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clark H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-376182/35.
P-PSDB; ADP54126.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wu TD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004039956-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       erythematosus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aggarwal S,
Wood WI, Wu
                                                                                                                                                                                                                                                                                                                                                                                                                                 18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-MAY-2004
                                                                                                                                                                        541
                                                                                                                                                                                                                                                                          51
                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                 ADP54125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New PRO pand treat
                                                                                                                                                                                                                                                                                                                             RESULT
                                                                엄
                                                                                                                               셤
                                                                                                                                                                      ò
                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                    ò
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a method of classifying a breast cancer patient according to prognosis by determining the similarity between the level of expression of each of five genes for which markers are listed in the specification, in a cell sample taken from the breast cancer patient, to control levels of expression for each respective five genes to obtain a patient similarity value. The methods are useful for classifying a breast cancer patient according to prognosis. Kits and computer program products are useful for data analysis using the diagnostic, prognostic and statistical methods of the invention. This sequence corresponds to a marker used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rendectractretrecerrendergeractrenderarractrecardearg 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATICCTIAAGCGACCCTITGGGACAACTCTIATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                               Classifying a breast cancer patient according to prognosis comprises determining the similarity between the level of expression of each of five genes in a cell sample taken from patient, to control levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.1%; Score 601; DB 13; Length 649; 99.7%; Pred. No. 7.5e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                  ds; breast cancer; prognosis; gene expression; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 847; 226pp; English
                                                   Breast cancer prognosis marker #847.
                                                                                                                                                                                                                                                                                           ROSETTA INPHARMATICS LLC NETHERLANDS CANCER INST.
                                                                                                                                                                                                                        15-JAN-2004; 2004WO-US001100.
                                                                                                                                                                                                                                                          LS-JAN-2003; 2003US-00342887.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.78;
                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                               He Y;
                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-593473/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                      WO2004065545-A2.
                                                                                                                                                                                                                                                                                                                                               Van't Veer LJ,
                 21-OCT-2004
                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                           (ROSE-)
(NECA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
mammal; (10) a method for determining the presence of a PRO polypeptide in a sample suspected of having the polypeptide; (11) a method of dispersions an immune related disease or an inflammatory immune response in mammal; (12) a method of identifying a compound that inhibits or mimics the activity of or expression of a gene encoding a PRO polypeptide; and (13) a method of stimulating the immune response in a mammal. The PRO sequences have antialersic, antianterit, antiarthritic, antiathermatic, antiathyvoid, CNS, dermatological, gastrointesinal, nemisthmeumatic, antiathyvoid, CNS, dermatological, gastrointesinal, nemostatic, hepatotropic, immunostimulant, immunosuppressive, muscular, nephrotropic, neuroprotective, osteopathic, respiratory, vasotropic or virucide activities, and can be used in gene therapy. The nucleic acid (1) and the encoded polypeptides, compositions, kits and methods are useful in diagnosing and treating an immune related disease and in the order of the control of the service of the service of the control of the service of the service of the service of the control of the control of the service 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATITGCTAAGIGICCTGAICTGCTCAIGAAAICCTICTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITACATITGCCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGTTGTTGTCGTTGAAGCCTTGG-CGAGCGCGCGGGGGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 50.1%; Score 601; DB 13; Length 649; Best Local Similarity 99.7%; Pred. No. 7.5e-142; Matches 623; Conservative 0; Mismatches 0; Indels ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                               stimulating an immune response. The present sequence
PRO nucleotide sequence from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGACGCGGGGGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
            $$$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

1592/c ADS17592 standard; cDNA; 649 BP.

RESULT 15 ADS17592/C ID ADS17 XX AC ADS17

ADS17592

```
The specification describes a method for quantitatively determining neurite outgrowth in a population of neuronal cells. The method comprises contacting a population of neuronal cells with a detection reagent capable of detecting annexin II, detecting an amount of annexin II in the population of neuronal cells, and determining a quantitative amount of neurite outgrowth in the population of neuronal cells based on the amount of annexin II. The method is useful for detecting neurite outgrowth and for screening compounds that modulate neurite outgrowth or that may be used to prevent or treat diseases and conditions relating to neurodegeneration, such as Alzheimer's disease, Parkinsonian syndromes, brain injuries or stroke. The present sequence encodes the pl1 subunit of human annexin II. The pl1 nucleotide sequence can be detected using the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Determining neurite outgrowth in a population of neuronal cells comprises detecting the amount of annexin II in the population of neuronal cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITACATITIGCIAAGIGICCIGAICIGCICATGAAAICCIICIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                          neurite outgrowth; neuronal cell; annexin II; neurodegeneration; Alzheimer's disease; Parkinsonian syndrome; brain injury; stroke;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 601; DB 13; Length 649;
Pred. No. 7.5e-142;
0; Mismatches 0; Indels 2
                                                                                                                                                                                                                           /product= "pl1 subunit of human annexin II"
                                             Nucleotide sequence of the pll subunit of human annexin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                           ĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 3; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                           (BGHM ) BRIGHAM & WOMENS HOSPITAL INC
                                                                                                                                                                           Location/Qualifiers
112. .405
                                                                                                                                                                                                                                                                                                                                                                                                                           Padmanaban D,
                                                                                           Alzheimer's disease; Parkinso
pll subunit; human; gene; ss
                                                                                                                                                                                                                                                                                                                          13-MAR-2004; 2004WO-US007749
                                                                                                                                                                                                                                                                                                                                                          13-MAR-2003; 2003US-0454254P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 649 BP; 197 A; 162
                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 99.7
Matches 623, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI: 2004-668882/65.
               (first
                                                                                                                                                                                                                                                                                                                                                                                                                           Cuny GD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P-PSDB; ADS17593
                                                                                                                                                                                                                                                           WO2004080424-A2
                                                                                                                                                                                                                                                                                           23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           ij
                                                                                                                                              Homo
                                                                                                                                                                             Key
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
d
                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated nucleic acid molecules encoding novel ovarian polypeptides, useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and neurological
                                                                                                                                                       540
                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                600
                                                                                                                          Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; infection; cardiovascular disorder; respiratory disorder; neurological disorder; gent cherestinal disorder; urinary system disorder; drug screening; gene therapy; chromosome mapping; forensic analysis; antibody preparation; cytostatic; immunomodulatory; neuroprotective; antiinflammatory; gynaecological; reproductive; gene; ss.
                                                                                                                                                                                                                    25
TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATTCCA
                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                            TTGGTGTGTGGTCGTTGAAGCCTTGG-CGAGGCGCGGACGCTGGGCGAGCTGGGGCGAG
                                                                      TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                Human ovarian antigen HCOOI71 cDNA, SEQ ID NO:1114
                                                                                                                                                                                                                                         CTGGACGCGGGCGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                           27
                                                                                                                                                                                                                                                     CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                      234/c
ABQ55234 standard; cDNA; 663 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-2001; 2001WO-US018569.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUN-2000; 2000US-0209467P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Birse CE, Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002-147878/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-147878/
P-PSDB; ABP42157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200200677-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                     22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JAN-2002.
                                                    350
                                                                                          290
                                                                                                                                                       481
                                                                                                                                                                                                541
                                                                                                                                                                                                                    110
                                                                                                                                                                                                                                         601
                                301
                                                                        361
                                                                                                                421
                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                               8 6
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                       셤
                        ठे
                                               8 S
                                                                                    셤
                                                                                                              ò
                                                                                                                             S
C
                                                                                                                                              ò
```

Claim 1; SEQ ID NO 1114; 2922pp; English

```
The invention relates to 2175 novel human ovarian antigens (ABP41054-CC ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polypucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigens or polyucleotides against human ovarian antigens, and the use of ovarian antigens and the use of ovarian antigens and the use of ovarian antigens or preventing various ovary and/or breast-related disorders. Such conditions include ovarian cancer and breast cancer, and metastatic tumours of ovarian or breast origin, reproductive system disorders (e.g., infertility, disorders of pregnancy, anovulation, cdisorders (e.g., infertility, disorders of pregnancy, anovulation, polycystic ovary syndrome, ovarian cysts, and dysmenorthoea), endocrine disorders, infertions (e.g., chlamydia, HIV, toxoplasmosis, and toxic shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and vaginitis), immune disorders (e.g., congenital and acquired conformed disorders (e.g., anaemia), cardiovascular disorders and uninary system disorders (e.g., anaemia), cardiovascular disorders cand uninary system disorders. Devian antigen polypoptides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polynucleotides may be used as food additives or to prepare antibodies cuseful in disease diagnosis, drug targeting and phenotyphing. The present consecular directly, which when ovarian antigen of the printed specification, in forensic analysis, and the consecular expresents cDNA encoding a human ovarian antigen of the printed specification, in five and a human ovarian antigen of the printed specification, in the sequence data for this patent did not form part of the printed specification, in the man and a human ovarian antigen of the printed specification, in the versus of the printed specification, in the man and an encoder of the printed s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 CCAĞGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    542 TGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGC 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 GAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACTAAAAAAAGACCTTTATTTATTTGAGGGCAAGGGGATGCAACCAATNCAAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGATICCITAAGCGACCCITIGGGACAACICITAICAGGGAGGAGCGAACIGCICATII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 TGAGGCCCGCATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 663 BP; 213 A; 148 C; 144 G; 152 T; 0 U; 6 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 595.8; DB 6;
Pred. No. 1.6e-140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tch 49.7%;
al Similarity 99.5%;
597; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                셤
                                                                                                                                                             ð
                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA46656-67 represent differentially expressed human genes, associated with disease states and disorders. The specification describes methods preventing, diagnosing and treating cardiac, kidney and inflammatory diseases associated with inappropriate expression of differentially expressed cardiac, kidney and inflammatory genes (e.g. AAA46556-67). These genes include 1-80, prostacyclin-stimulating factor, isf-2, tissue pecific mRNA, insulin-like growth factor binding protein 6, OSF-1, gas-1, YMP, BTG2, pre-B cell stimulating factor homologue (SDF1a), peripheral benzodiazepine receptor, and cellular ligand of annexin II (pil), respectively. These diseases include congenital heart failure, dilated congestive cardiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy, mitral valve disease, acriic valve disease, tricuspid arthythmia, pulmonary hypertension, arterial hypertension, renovascular hypertension, arteriosclerosis, atherosclerosis and/or cardiac tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypertrophic cardiomypathy, restrictive cardiomyopathy; whypertrophic cardiomypathy; restrictive cardiomyopathy; mitral valve disease; acrtic valve disease; tricuspid valve disease; acrtic valve disease; tricuspid valve disease; acrtic myozardial infarction; cardiac arrhythmia; pulmonary hypertension; arterial hypertension; renovascular hypertension; arteriosclerosis; atherosclerosis; cardiac tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SDF1a;
Differentially expressed human gene, cardiac disease, kidney disease, inflammatory disease, I-8U; prostacyclin-stimulating factor; isf-2; tiseus epecific mRNA; insulin-like growth factor binding protein 6; 0SF-1; gas-1; YMP; BTG2; pre-8 cell stimulating factor homologue; SDF) peripheral benzodiazepine receptor; annexin II cellular ligand; pl1; congenital heart failure; dilated congestive cardiomyopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Preventing, diagnosing and treating cardiac, kidney and inflammatory disorders using cardiac genes that are differentially expressed in disease states such as cardiac arrhythmia and arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schreiner
                                                                                                                                                                                                                                                                                                                                                                          of a human gene encoding cellular ligand of annexin II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 557; DB 3; Length 579;
Pred. No. 1e-130;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 579 BP; 185 A; 127 C; 124 G; 143 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lewicki JA, Joly A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 5L; 170pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Damm DL,
                                                                                                                                                                                          AAA46667 standard; cDNA; 579 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US029941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0113008P
                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      White RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-451904/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SCIO-) SCIOS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200035473-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-DEC-1999;
                                                                                                                                                                                                                                                                                                                25-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stanton LW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-JUN-2000
                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                                         RESULT 17
AAA46667/C
LD AAA46667/C
LD AAA46
XX AAA46
XX AAA46
XX AAA46
XX LISSU
KW DIFFE
KW INTIE
KW POSF-1
KW POSF-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                   g
```

```
180
                                                                          400
                                                                                                       240
                                                                                                                                341
                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  colon cancer polypeptides and polynucleotides, useful as vaccines, diagnosing, preventing, and treating colon cancer, and as markers for progression of cancer.
                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; colon tumour; vaccine; colon cancer; immunogenic; immunotherapy;
                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                         AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTTTTGTCCACAGCGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                      100 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                           TIGGIGIGGICCGTIGAAGCCTIGGCCGAGGCGCGCGCAC 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                          rregreregrecerreaageerreg-caageegegeage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA encoding colon tumour protein, SEQ ID No 890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Secrist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-2000; 2000US-0223283P.
28-MAR-2001; 2001US-0279763P.
29-JUN-2001; 2001US-0302051P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-JUL-2001; 2001WO-US024218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ה
כי
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK45339 standard; cDNA; 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Meagher MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-241739/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CORI-) CORIXA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200212328-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-FEB-2002
61
                       519
                                                  121
                                                                             459
                                                                                                      181
                                                                                                                                399
                                                                                                                                                           241
                                                                                                                                                                                    340
                                                                                                                                                                                                               301
                                                                                                                                                                                                                                        280
                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK45339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  King GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New
for
the
```

Gaps

7

579 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 520

1 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA

Matches 579; Conservative

Similarity

Best Local

ઠ 8

```
The present sequence is one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. No ORF has yet been conclusively identified within the present sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-df primed cDNA libraries. Such ESTs are not wall suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer CDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence tag; secreted protein; cDNA isolation; mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rerectrighteaargagagringaritraritriracatrigeraagrerectgarerect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTCTTCCTTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTETTATEAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cregaagcccacrrrrgccarcrcracacregrccaggrccrrcarrarrrrgrccacagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCCCCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                               New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          They are used to obtain upstream regulatory sequences and to design
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 523; DB 3; Length 582;
Pred. No. 4.1e-122;
4; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 14898; 71pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 582 BP; 183 A; 135 C; 130 G; 129 T; 0 U; 5 Other;
                                                                                                                                                                                                                                                                          Giordano
                                                                                                                                                                                                                                                                            Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression and secretion vectors
                                                                                                                                                                   21-FEB-2000; 2000EP-00200610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 43.6%;
Best Local Similarity 97.9%;
Matches 547; Conservative
                    gene therapy; chromosome
     expressed
                                                                                                                                                                                                                                                                          Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                              WPI; 2000-500381/45
                                                                                                                                                                                                                                        GEST ) GENSET
                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               270
   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                              The invention relates to polynucleotides encoding colon tumour proteins. The polynucleotides and encoded polypeptides are useful in pharmaceutical compositions, such as vaccines, for the diagnosis, prevention, and treatment of colon cancer. Polynucleotide sequences may be used as hybridisation probes or primers, and in the design and preparation of ribozyme molecules for inhibiting expression of tumour polypeptides and proteins in tumour cells. The compositions are useful for stimulating an immune response against cancer, particularly for the immunotherapy of colon cancer, and as markers for the progression of cancer. ABK4450-ABK46237 represent coding sequences of human colon tumour proteins of the invention. Note: With the exception of SEQ ID No 1 and 2, the sequence data for this patent did not form part of the printed specification but was supplied by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                      87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCANATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GNAACTAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGGAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                              6; Length 571;
                                                                                                                                                                                                                                                                                             Sequence 571 BP; 139 A; 115 C; 107 G; 203 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                              Score 537; DB 6; Length 57
Pred. No. 1.2e-125;
0; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human secreted protein 5' EST, SEQ ID NO: 14898.
Claim 1; SEQ ID NO 890; 147pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC10823 standard; cDNA; 582
                                                                                                                                                                                                                                                                                                                              / Match
Local Similarity 98.7%;
nes 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  148
                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC10823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6 8 6
 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

4; Gaps

149

463

523

89

209 405 269

a ⋧ අ ò 유

8

```
231
                            291
                                                          401
                                                                                                                     461
                                                                                                                                                171
                                                                                                                                                                               521
                                                                                                                                                                                                            TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG 111
                                                                                                                                                                                                                                         The present invention relates to novel human GENSET coding sequences (ACC51060-ACC51115) and proteins (ABR48455-ABR48508). The GENSET sequences are useful for preparing a composition for treating GENSET-related disorders. They can also be used as markers for tissues in which the corresponding protein is preferentially expressed, as molecular weight markers on Southern gels, as chromosome markers or tags to identify chromosomes, and as reagents in assays to quantitatively determined levels of GENSET escretsion in biological samples
                                                                                                                                                                                                                                                           TTCCATTTGAGATGGCATTTTGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGCGGGAC 51
   ATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCAC
                    TTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACGCCAGAGGGTCTTT
                                                           TTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTT
                                                                                                                    TTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGT
                                                                                                                                                   TIGATITITCCAAAAAICCAGGGAACTCCIITITCCAIGAGIACTCTCAGGICCTCCTITGI
                                                                                                                                                                               TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New GENSET polynucleotides and polypeptides, useful for preparing a composition for treating GENSET-related disorders and as reagents is assays to quantitatively determined levels of GENSET expression in biological samples.
                                                                                                                                                                                                                                                                                                     GCTGGGCGAGCTGGGCGGGCCGGGGCGGAGAGGC 621
                                                                                                                                                                                                                                                                                                                                11
                                                                                                                                                                                                                                                                                                                     GCTGGGCGAGCTGGGCGAGCTGGACGCGGGGCGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human S-100A10 Related Protein coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; GENSET; therapeutic; therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 400-401; 505pp; English.
                                                                                                                                                                                                                                                                                                                                                                                             ACC51060/c
ID ACC51060 standard; cDNA; 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAY-2001; 2001US-0293574P.
15-JUN-2001; 2001US-0298698P.
29-JUN-2001; 2001US-0302277P.
13-JUL-2001; 2001US-0305456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-AUG-2001; 2001WO-IB001715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tanaka H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-129412/12.
P-PSDB; ABR48453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200294864-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bejanin S,
                            350
                                                          342
                                                                                      290
                                                                                                                     402
                                                                                                                                                   230
                                                                                                                                                                               462
                                                                                                                                                                                                            170
                                                                                                                                                                                                                                         522
                                                                                                                                                                                                                                                                       110
                                                                                                                                                                                                                                                                                                     582
                                                                                                                                                                                                                                                                                                                                20
 282
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC51060;
                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                           a
                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                        Š
                                                                              g
                                                                                                          ठ
                                                                                                                                                                    ें
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                            107
                                                          569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKRZp5661133 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAAG 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGG 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for inhibition of DKF2p5661133 activity.
                 GTCCTTCTTGTTAAGTAGCTTTATYCCCAGCGAATTTGYGAAATGTAMACRTCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGAGCGAACTGCTTCTGCCTACTTCTTCCCTTCTGCTTCATGTGTACTACAAA
GTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT
                                                        TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCGTCCGTTGAAGCCTTGGCCGA
                                                                                      Trechrecefrerrearriederescarriresreresreseresadecrrescen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAGAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                              ds; cytostatic; gene therapy; DKFZp5661133 activity inhibitor; breast cancer; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 530;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 530 BP; 160 A; 133 C; 124 G; 113 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43.1%; Score 516.8; DB 10; Length llarity 99.6%; Pred. No. 1.5e-120; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                Breast cancer differentially expressed gene product #76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 30; SEQ ID NO 76; 257pp; English.
                                                                                                                    GGCGCGCGGACGCTGGGC 588
                                                                                                                                              dececececrarecec 28
                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              518;
450
                          991
                                                        510
                                                                                    106
                                                                                                                  570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               410
                                                                                                                                                46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
```

g ò 음

∂

X S

ò В P

ò

장염 ∂

```
The invention relates to an isolated polynucleotide comprising any one of 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was determined by the technique of G SBH (sequencing by hybridisation). Also included is a purified polypeptide comprising a sequence corresponding to a reading frame of the novel polynucleotide. The nucleic acid sequences are useful in diagnostics as expressed sequence tags (EST) for identifying expressed genes or for physical mapping of the human genome, in forensics, in assessing biodiversities, or in identifying mutations responsible for genetic disorders and other traits. The nucleotide sequences are also useful as hybridisation production of protein, or in generating antisense DNA or RNA. The purified polypeptide is useful for generating antibodies specific for it. The present sequence is one of the 3843 isolated cDNA/EST sequences. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               417 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCTTTGGGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                477 recriercaareaggerragarrirrarrirracarriecraagierecrearcrecrea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           152 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              237 GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     392 GAGGGTCTTTTTGATTTTCCAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177 GAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 CCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT
                                                                        New polynucleotide sequences obtained from various cDNA libraries, as hybridization probes, as oligomers for PCR, for chromosome and grapping, in the recombinant production of protein, or in generating
Jones LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92 IGCTIGICAAAIGAGAGITAGAITITIATITITACATTIGCTAAGIGICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 477 BP; 158 A; 100 C; 109 G; 109 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
Dickson MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         segdata.uspto.gov/sequence.html?DocID=20030073623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    35.8%; Score 429.4; DB 9; 99.8%; Pred. No. 1.9e-98; iive 0; Mismatches 1;
                                                                                                                                                                         Claim 1; SEQ ID NO 21508; 44pp; English
Stache-Crain B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 踞.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADF79487 standard; DNA; 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 99.8 es 430; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47
Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATGGCGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATGGCGTCT
                                                                                                                                    antisense DNA or RNA
                                      WPI; 2003-615964/58
RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF79487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADF79487/
ID ADF7
XX
AC ADF7
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                       1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1653
                                                                                              o,
                                                                                                                                                                                                                                                                                                            552
                                                                                                                                                                                                               192
                                                                                                                                                                                                                                                                                                                                                                    312
                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST;
                                                                                                                                                                   TTTTTTTTTTTTTTTCTTTCTCTGTCAAATGAGGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                             AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                   AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTGCTCC
                                                                                                                                                                                                                                                                                       AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTATTTTGCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ss; sequencing by hybridisation; SBH; expressed sequence tag; mapping; biodiversity; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGAAGCCTTGGCCGAGGCGCGCGGCGCCTGGGCGAGCTGGGCGAGCT 602
                                                                                              ö
                                                      Length 2016;
                  625 A; 461 C; 428 G; 502 T; 0 U; 0 Other;
                                                                                                                                  TATTTAACTTTTCTTTTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                              Indels
                                                    Score 485.2; DB 8;
Pred. No. 2.6e-112;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human endothelial cell cDNA #2429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACH34296 standard; cDNA; 477
                                                    40.5%;
llarity 94.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LABAT I.
STACHE-CRAIN B.
DICKSON M C.
JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DRMANAC R T.
                                                Query Match
Best Local Similarity
Matches 502; Conserv
                  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003073623-A1
                Sequence 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-APR-2003.
                                                                                                                                                                       2012
                                                                                                                                                                                                                                                                                                                            1892
                                                                                                                                                                                                                                                                                                                                                                                                        1832
                                                                                                                                                                                                                                                                                                                                                                                                                                               313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1592
                                                                                                                                  73
                                                                                                                                                                                                             133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1532
                                                                                                                                                                                                                                                   1952
                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACH34296;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (LABA/)
(STAC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DICK/)
(JONE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DRMA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         депоше
```

d

ò g ò a

ð g ò 셤

418 211 3,58 271 298 331

Gaps

ö

391 178 451 118 511

```
ä
                                                                                                                                                                                                                                                                                                                                                                                                    Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense DNA or RNA.
                                                                                                                                                                                                                                                                                                                                                  LABAT I.
STACHE-CRAIN
                                                                                                                                                                                                                                                                                                                                        DRMANAC R T.
                                                                                                                                                                                                                                                                                                                                                                      DICKSON M C.
JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-615964/58.
                                                                                                                                                                                                                                                      US2003073623-A1
                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                          13-OCT-2003
                                                                                                                                                                                                                                                                           17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                    Drmanac RT,
                                                                                                                                     ACH25344;
 486
                    75
                                         546
                                                             15
                                                                                                                                                                                                                                                                                                                                                                      (DICK/)
                                                                                                                                                                                                  Human;
                                                                                                                                                                                                                                                                                                                                        (DRMA/)
                                                                                                                                                                                                                                                                                                                                                             (STAC/)
                                                                                                                                                                                                                                                                                                                                                   LABA/
                                                                                                      ACH25344/c
                                                                                                                  셤
                                                        g
                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126 ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TICCITAAGCGACCCTTIGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTICTGC 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCCTTCATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTATCCCCAGCGAA 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    255 GCCCGCAATTAGGGAAAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 136
                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method (M1) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA 76
                                                                                                                                                                                                                                                                                                       Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in a
                                                                                                                                                                                                                                                      Dugas M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35.3%; Score 423; DB 10; Length 434; 99.8%; Pred. No. 7.7e-97; rive 0; Mismatches 0; Indels 1
                                                                                                                                                                                                                                                     Schnittger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 434 BP; 139 A; 96 C; 102 G; 97 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     Kohlmann A,
                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 43; 2938pp; English
                                                   Cytostatic; Gene therapy; leukaemia; ss
                                                                                                                                                                                  DEUT KREBSFORSCHUNGSZENTRUM.
UNIV LUDWIG MAXIMILIANS.
HAFERLACH T.
                             Leukaemia-related DNA seguence #43
                                                                                                                                                                                                                                                                ŝ
                                                                                                                                                                                                                                                    nareriach T, Schoch C, Kern W,
Eils R, Brors B, Mergenthaler S
                                                                                                                                    04-NOV-2002; 2002WO-EP012303
                                                                                                                                                        2001EP-00126244
2002EP-00009758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 434; Conservative
                                                                                                                                                                                                                                                                                   WPI; 2003-505037/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                    (DEKR-) DEUT KREBS
(UYLU-) UNIV LUDWI
(HAFE/) HAFERLACH
(SCHO/) SCHOCH C.
(KERN/) KERN W.
                                                                                          WO2003039443-A2.
                                                                                                                                                                                                                                                                                                                                        patient sample.
                                                                       Unidentified.
                                                                                                                                                        05-NOV-2001;
30-APR-2002;
                                                                                                                LS-MAY-2003,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ⋧
```

```
The invention relates to an isolated polynucleotide comprising any one of 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was determined by the technique of SBH (sequencing by hybridisation). Also included is a purified polypeptide comprising a sequence corresponding to a reading frame of the novel polynucleotide. The nucleic acid sequences care useful in diagnostics as expressed sequence tags (EST) for identifying expressed genes or for physical mapping of the human genome, in forensics, in assessing biodiversities, or in identifying mutations responsible for genetic disorders and other traits. The nucleotide sequences are also useful as hybridisation probes, as oligomers for PCR, for chromosome and gene mapping, in the recombinant production of protein, or in generating antibodies specific for it. The present sequence is one of the 38043 isolated cDNA/RST sequences. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polynucleotide sequences obtained from various cDNA libraries, useful as hybridization probes, as oligomers for PCR, for chromosome and gene mapping, in the recombinant production of protein, or in generating
TITGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expressed sequence tag; EST;
                                             TTTGTGAAATGTAAACATCATGGTTTCCATGCGTGTTCCATTTGAGATGGCATTTTGGT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jones LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35.2%; Score 422; DB 9; Length 466; 100.0%; Pred. No. 1.4e-96; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 466 BP; 142 A; 102 C; 108 G; 106 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dickson MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      segdata.uspto.gov/seguence.html?DocID=20030073623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; sequencing by hybridisation; SBH; emapping; biodiversity; genetic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 12556; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stache-Crain B,
                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACH25344 standard; cDNA; 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human adult ovary cDNA #3724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUL-2001; 2001US-00918995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-2001; 2001US-00918995.
                                                                                                                                                          GIGGICCGIIGAAGC 560
                                                                                                                                                                                                                GIGGICCGIIGAAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0
Matches 422; Conservative
```

Page

ö

6 6 6

g õ

음 강

g &

8 & 8

ò 원 à 셤

```
180
                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                      359
                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                                                                                                        179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAACCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH12943 to AAH17195 and AAG73514 to AAG77788 represent human colon cancer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antigens. The colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : acids encoding 4277 human colon cancer-associated polypeptides, for preventing, diagnosing and/or treating colorectal cancers.
                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178 TCTGCCTACTTCTTTCCCTTCTGTCTTGTACTACTACAAATAGTCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                            1 GGAACTAAAAAGGAACTTTATTTATTGGGCCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                         TITACATITIGCTAAGIGICCTGAICTGCTCAIGAAAICCTICTAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, colon cancer; colon cancer antigen, diagnosis, detection, colorectal carcinoma; chromosome 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCC 411
                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCC
                    Length 441;
                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human colon cancer antigen encoding cDNA SEQ ID NO:2408
                    34.3%; Score 411; DB 4; 100.0%; Pred. No. 8.5e-94; iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 3960; 9803pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Birse CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-0157137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH35326 standard; cDNA; 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-SEP-2000; 2000WO-US026524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                         Best Local Similarity 100.
Matches 411; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Barash SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-235357/24.
P-PSDB; AAG75921.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200122920-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-SEP-1999;
03-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ruben SM,
                                                                                                                                                        418
                                                                                                                                                                                                  61
                                                                                                                                                                                                                                             358
                                                                                                                                                                                                                                                                                                                                     298
                                                                                                                                                                                                                                                                                                                                                                                                                             238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH35326;
                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28
                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                   셤
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                       244
                                                                                                              ATTCCTTAAGGGACCCTTTGGGACACTCTTATCAGGAGGAGGAGCGAACTGCTCATTCTG 347
                                                                                                                                                                                                                         287
                                                                                                                                                                                                                                                                                                                                                                                                      167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544
                       CATTIGCTAAGIGICCIGATCIGCTCATGAAAICCTICTAIGGGGGAAGCIGIGGGGGCAG 407
                                                                                                                                                                                                                                                                                                                227
                                                                                                                                                                                                                                                                                                                                                        GGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGA 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGA 107
                                                                                                                                                                             GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acids encoding 13 human colon cancer associated polypeptides, useful for preventing, diagnosing and/or treating e.g. cancers (especially colon cancer), Parkinson's disease and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to 13 human colon cancer-associated proteins. These proteins and the nucleic acid encoding them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon cancer-associated protein expression
                                                                                                                                                                                                      CCTACTTCTTTCCCTTCTGCTTCTGTGTACTACAAAATAGTCATTGCATGCTGA
                                                                                                                                                                                                                                                                                              GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA
                                                                                                                                                                                                                                                                                                                                                                                   CATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTGTGAAAATGTAAAACATCATGGTTTCCATGCGTGTTCCATTTGAGATGGCATTTTGG
                                                                                     ATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 441 BP; 158 A; 87 C; 89 G; 107 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human colon associated protein cDNA sequence #16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 314; 326pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; colon; cancer; disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                092/c
AAF75092 standard; cDNA; 441 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-AUG-2000; 2000WO-US022157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0148680P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Birse CE, Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-147551/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TG 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200112781-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-FEB-2001
                                                                                                                                                                          245
125
                                         466
                                                                                     185
                                                                                                                                 406
                                                                                                                                                                                                                      346
                                                                                                                                                                                                                                                                  305
                                                                                                                                                                                                                                                                                                            286
                                                                                                                                                                                                                                                                                                                                                          365
                                                                                                                                                                                                                                                                                                                                                                                                      226
                                                                                                                                                                                                                                                                                                                                                                                                                                                  425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF75092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF75092/LID AAF75092/LID AAF75092/LID AAF77 AAF
```

```
08-JAN-2002; 2002US-0345637P.
                                08-JAN-2003; 2003WO-US000657
                                                                                                                    (CHIR ) CHIRON CORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                   Hansen R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABI99809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patients own production of P. Additionally, N may be used to produce the colon cancer-associated Ps, by inserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and P can be used in the prevention, diagnosis and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204 and AAB77789 represent sequences used in the exemplification of the present invention. N.B. Pages 666 to 682 and page 7053 of the sequence listing were missing at time of publication, meaning no sequences are present for SEQ ID NO:1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                             7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTTGTCAAATGAGAGTTAGATTTATT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCT-AAGTGTCCTGAT--CTGCTCATGAAATCCTTCTATGGGGGGAAGCTGT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 512 GGAACTAAAAAGGAACTTTATTGAGGGCAAGGGGATGCAACCAATNCAAAAATCAA 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTNAAGTGTCCTGNTTNNGGTCCNTAANTCCTTTNTATGGGGNAANCTGT 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTICTGCCTACTICCTTTCCCTTCTGCTTCTACAAAATAGTCATTGCATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTCCAGGTCCTTCATTATTTTGTCCACAGAGAGGCTCTTTTGATTTTTCCAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGCTCTTTTTGATTTTCCAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ds; cytostatic; gene therapy; DKFZp5661133 activity inhibitor; breast cancer; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                 DB 4; Length 632;
                                                                                                                                                                                                                                                                                                                                                                    Sequence 632 BP; 191 A; 139 C; 137 G; 146 T; 0 U; 19 Other;
                                                                                                                                                                                                                                                                                                                                                                                                            Score 396.2; DB 4; Length
Pred. No. 5.5e-90;
0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Breast cancer differentially expressed gene product #78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGGAACTCCTTTTCCATGAG 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33.0%;
95.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADK11672 standard; DNA; 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 95.7'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003057926-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK11672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 27
ADK11672/c
ID ADK11
XX
AC ADK11
XX
DT 06-M2
XX
DE Breas
XX
C d8; c
KW breas
XX
C NW breas
XX
C NW breas
XX
C NW breas
XX
C NW DY
C N
      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

```
452
                                                                                                                                                                                                The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKRZp5661133 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTTGTCCACAGCCAG 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGCTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTC 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTC 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGC 572
                                                 Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for inhibition of DKFZp5661133 activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 333 GAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGGTCTTTTTGATTTTCCAAAAATCCAGGAACTCCTTTTCCATGAGTACTCTCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                        29.0%; Score 347.4; DB 10; Length 350; 99.7%; Pred. No. 9.9e-78; ive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse; ischaemia; compressive ischaemia; occlusive ischaemia; vasospastic ischaemia; ischaemic condition; ischaemic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse ischaemic condition related cDNA sequence SEQ ID NO:919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGGCGGACGCTGGCCTGGCCTGGACGCGGGCGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 350 BP; 96 A; 94 C; 84 G; 76 T; 0 U; 0 Other;
                                                                                                                                                 Claim 30; SEQ ID NO 78; 257pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABI99809 standard; cDNA; 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.7
Matches 348; Conservative
WPI; 2003-577534/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200188188-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-NOV-2001
```

ö

67

```
The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKF2956611313 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for
                                                                 597
                                                                                                        10
CAAACCTGTGAAACGTAAGCATCATGGTTTCCATGGCGTGCTCCATTTGGGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341 AATAGTCATTACATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCAGAGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rrrgarrrrccaaaaarccagggaacrccrrrrccargagracrcrcaggrccrcrrrg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITGATITICCAAAAATCCCAGGGAACTCCTTITCCATGAGTACTCTCAGGTCCTCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161 TTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                         TGAAG-AGTCTGTCGAAACCTGGGCCCCGAAGCGCAGCAGTCCTTGGAAGAGCTGGGC
                                                                 TGGTGTGGTCCGTTGAAGCCTTGG---CCGAGGCGCGCGGCGGCCGGCCGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; gene therapy; DKFZp5661133 activity inhibitor; sst cancer; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 10; Length 341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAGTCATTGCATGCAATGGTGAGGCCCCGCAATTAGGGAAAAAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                           Breast cancer differentially expressed gene product #77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 341 BP; 94 A; 94 C; 80 G; 73 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ή.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 339.4;
Pred. No. 1e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 30; SEQ ID NO 77; 257pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibition of DKFZp5661133 activity.
                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JAN-2003; 2003WO-US000657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JAN-2002; 2002US-0345637P
                                                                                                                                                                                                                   DNA; 341
                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 99.7 les 340; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-577534/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CHIR ) CHIRON CORP
                                                                                                                                                                                                                 ADK11671 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003057926-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                    06-MAY-2004
                                                                 542
                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hansen R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                          ADK11671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                     ò
                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'n
                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for examining ischaemic conditions, comprising measuring the expression levels of particular genes (I) in a test sample or determining the expression profile of a gene group in the sample or determining the expression profile of a ischaemia, occlusive ischaemia or vasospastic ischaemia) by measuring expression levels of particular genes (ABI99202 to ABI99912, encoding the protein sequences in ABB57020 to ABB57174) or by determining the expression profile of a gene group comprising these genes. The expression livels or expression profiles produced by these genes are used as an indicator when screening for ischaemic condition-improving drugs or therapeutics for ischaemic diseases. ABI99913 and ABI99914 represent PCR primers for a mouse ischaemic condition related sequence, which are used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTCCCGTTCCATGAGCACTCTCAGGTCCTCTTTGTCAAGTGGTCTTTGTCGCCTG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182 CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT 541
                                                                                                                                                                                                                                                      Examining the ischemic condition (e.g. occlusive ischemia) by measuring expression levels of particular genes defined in the specification or by determining the expression profile of a gene group comprising these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              redectratrictricecerreserrestratracraeaaarastracraecares
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAAAGGACTTTCTTTATTGAGGGCAATGGGATGCAAACAACAATATAAAACTTCAGAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTCCTAAGGGTCCTGATCTGCTCACAA------GAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reasccccccacrastastastascrcrssaascccrcacrrrsccarcrcsscrss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGGAGCGAACTGCTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTICCTICAAGTGACCCCGTGGACACGCACCAGGGTGGGGGTACCAGTGCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAGGCCCGCATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 600 BP; 165 A; 140 C; 151 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99; Indels
                                                                                                                                                    Ishii Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 343.6; DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 1.1e-76
                                                                                                                                                  Nagata T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                      (UYNI-) UNIV NIHON SCHOOL JURIDICAL PERSON
                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 2323-2324; 2690pp; English.
                                                                                                                                                  Takahashi Y,
                       18-MAY-2001; 2001WO-JP004192
                                                               2000JP-00145977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 79.6%;
Matches 476; Conservative
                                                                                                                                                  Asai S,
                                                                                                                                                                                           2002-034733/04
                                                                                                                                                                                                               P-PSDB; ABB57331
                                                               18-MAY-2000;
                                                                                                                                                  Ishikawa K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                       geneg
```

용

ð

QQ

ò В 8

ઠે

8 6 8

g

ò

õ

셤 ò 유 ò

ö

```
monkey;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            monse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200226984-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK72684;
                                                                                                                                                                                                                                                                                                                                                                                                                      543
            ~
                                   569
                                                        67
                                                                             509
                                                                                                                         449
                                                                                                                                                                     404
                                                                                                                                                                                                                348
                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                            288
                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                        228
                                                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                                                    168
                                                                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                                                                                                                                                                                                                                                                                                           48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        a
              8 8
                                                                        셤
                                                                                                   8
                                                                                                                    g
                                                                                                                                             8
                                                                                                                                                               8
                                                                                                                                                                                         ò
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence encodes a potassium channel interactor protein (PCIP). The PCIP polypeptides bind to a potassium channel, modulate the activity of a potassium channel protein, and/or modulate a potassium channel mediated activity in a cell. The polymucleotides and polypeptides are useful in the treatment of epilepsy, and spinocerebellar ataxia, as well as nervous system related disorders and cardiovascular disorders associated with abnormal transient outward currents. They are also useful for identifying compounds which can bind to and modulate the expression and function of the PCIP nucleic acid molecules, and proteins
                                                                                                                                                                                                    Potassium channel interactor; PCIP; potassium channel; epilepsy; spinocerebellar ataxia; nervous system disorder; cardiovascular disorder; transient outward current; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polynucleotide with homology to the sequence encoding phosphate channel interacting protein useful in the treatment of e.g. epilepsy and spinocerebellar ataxia.
cDNA sequence encoding a potassium channel interactor polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 600 BP; 193 A; 131 C; 137 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 329.8; DB 3; Length Pred. No. 3.6e-73; 0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                        "potassium channel interactor"
                                   621
                                               CGCTGGGCGAGCTGGGCGGACGCGGGGCGGAGGC 1
                                   CGCTGGGCGAGCTGGACGTGGACGCGGGGCGGAGAGGC
                                                                                                                                                                                                                                                                       Location/Qualifiers 52. .339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ling H, An W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 32; 306pp; English
                                                                                                                踞
                                                                                                                                                                                                                                                                                                                                                                                                          98US-0110033P.
98US-0110277P.
99US-00298731.
                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00350614.
99US-00350874.
99US-00399913.
                                                                                                              AAA46561 standard; cDNA; 600
                                                                                                                                                                                                                                                                                                                                                                                                 98US-0109333P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 27.5%;
Best Local Similarity 77.8%;
Matches 458; Conservative
                                                                                                                                                                                                                                                                                                                                                                           99WO-US027428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00400492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROD
                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                        /product=
                                                                                                                                                                                                                                                                                               /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PHA
(AMHP ) AMERICAN HOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-400043/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Betty M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P-PSDB; AAY93492
                                                                                                                                                                                                                                                                                                                               WO200031133-A2
                                                                                                                                                                                                                                                                                                                                                                                                          25-NOV-1998;
30-NOV-1998;
23-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                           09-JUL-1999;
09-JUL-1999;
21-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                           19-NOV-1999;
                                                                                                                                                          25-SEP-2000
                                                                                                                                                                                                                                                                                                                                                      02-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rhodes K,
                                                                                                                                                                                                                                                  Rattus sp
                                   581
            101
                                                      41
                                                                                                                                     AAA46561,
                                                                                         RESULT 30
AAA46561/
                                                      셤
                                                                                                                         ઠે
```

```
510
                                                                              122
                                                                                                                                                                                                                                                                                                                                                                289
                                                                                                                                                                                                                                                                                                                                                                                                                                                229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                      CTCTGTCATTGGATTAACTTTTCTTTTCTTGCTTGTCGAATTGGAGTTGGATGTTATTTG 450
                                                                                                                                                                                                    405
                                                                                                                                                                                                                                                                                  349
                                                                                                                                                                                                                                                                                                                                                                                                        GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                          183 AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                          AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT 49
  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 central nervous system disorder; epilepsy; spinocerebellar ataxia; gene; central nervous system disorder; Alzhaimer's disease; memory 10ss; ss; affective disorder; amesaia, Alzhaimer's disease; memory 10ss; ss; depression; Parkinson's disease; multiple sclerosis; migraine; angina; spychiaturic disorder; neurological disorder; arteriosclerosis; restenosis; heart failure; idiopathic cardiomyopathy; gene therapy; myocardial infarction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                potassium channel interacting protein; PCIP;
                                                                                                                                                                                                                                                                                                                                                   CAGGTCTTTCATTATTTTGTCCACAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG
                                        AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCCCCCCCACTAGTAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                              ATCTGGTAT ----TTAACTTTTCTTTCTCTGCTTGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                     AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGGTACCAGGGC---T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA encoding rat potassium channel interacting protein (PCIP) #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gaag-aarcretreaaccreeeccreaeececrecaercrrreaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-2000; 2000US-00670756.
31-OCT-2000; 2000US-00703094.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK72684 standard; cDNA; 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-2001; 2001WO-US030463
```

(MILL-) MILLENNIUM PHARM INC

Gaps

24;

ABK63467 standard; cDNA; 573 BP.

```
The invention relates to an isolated potassium channel interactor protein (PCIP) and the polymucleotide encoding it. The DNA and protein sequences are useful for treating potassium channel associated disorders such as central nervous system (CNS) disorders, epilepsy, spinocerebellar ataxia, affective disorders, almesia, Alzheimer's related memory loss, affective disorders, allowed misorders such as Alzheimer's disease, Parkinson's disease and multiple sclerosis, psychiatric disorders such as depression, neurological disorders such as mighaine and stroke, arteriosclerosis, restenosis, heart failure, angina, represents cDNA encoding a PCIP of the invention. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTCCTCAGTTGACCCCATGGGAGGGACGCATCAAGGTGTGGGGTACCAGGGC----T 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                509 crcristratradarita de la contratración de la contrata del contrata de la contrata de la contrata del contrata de la contrata del la contrata de  la contrata de  contrata del la contrata del la contrata de la contrata de la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449 CACATTTCCTAAGGGTCCTGATCTGCTCA-------CACGAAGCAGTGGGGC 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT 66
                                                                                                                                                                                                                New isolated potassium channel interactor polypeptide, useful for
treating central nervous system disorder, epilepsy, spinocerebellar
ataxia, cardiovascular disorder, and nervous system related disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGICTITCATITATITITGTCCACAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCCCCCCCACTAGTAGAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACTCCCTTTCCATGAGCACTCTCAGGTCTTCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6; Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 600 BP; 193 A; 131 C; 137 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tch al Similarity 77.8%; Score 329.8; DB 6; Length 6 al Similarity 77.8%; Pred. No. 3.6e-73; 458; Conservative 0; Mismatches 107; Indels
                                     An W;
                                                                                                                                                                                                                                                                                                                                                                 Example 21; Fig 32; 259pp; English
                                     'n
                                     Ling
                                     Betty M,
                                                                                                          WPI; 2002-416482/44
                                                                                                                                                P-PSDB; ABG60611
                                     Rhodes K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

The inventor fracters to methods for producting toxic effects by determining the compounds or the progression of these toxic effects by determining the global changes in gene expression in tissues or cells exposed to the coxic compound or progression of a toxic effect, preferably the cells. Also included are methods of predicting at least one toxic effect of a compound or progression of a toxic effect, preferably the ceptorixicity of a compound, comprising detecting the level of expression in a tissue or cell sample exposed to the compound of two or more genes is indicative of at least one toxic effect or progression. The ceptonse and predict cellular pathways that a compound modulates the toxic response and predict cellular pathways that a compound modulates in a capport in kit form), where each of the probes comprises a sequence that specifically hybridises to a gene listed in the specification, a computer specifically hybridises to a gene listed in the specification, a computer system comprising a database containing information identifying the expression level in a tissue or cell sample exposed to a hepatotoxin of a cet of genes comprising at least two genes listed in the specification, and a user interface to view the information used to present information classified in the specification. The method is useful for elucidating global changes in gene expression and for identifying toxicity markers in the companion and for identifying teachers and the containing and toxicity agance and and and and toxicity agance and the containing and toxicity agance and and toxicity agance and the containing and toxicity agance and and and toxicity

The invention relates to methods for predicting toxic effects of

Claim 1; SEQ ID NO 1374; 239pp; English.

toxicity markers in drug screening and toxicity assays. The genes and gene expression information may be used as diagnostic markers for the prediction or identification of the physiological state of tissue or cell sample that has been exposed to a compound or agent. Hepatotoxicity is characterised by centrilobular necrosis and steatosis. The present sequence is an expressed sequence tag (EST) or cDNA derived from a gene which is differentially expressed in response to a hepatotoxic agent

RESULT 32 ABK63467/c

```
Predicting toxic effects of compounds or the progression of these toxic effects by determining the changes in gene expression in tissues or cells exposed to the toxin and comparing these to gene expression in unexposed tissues or cells.
                                            Rat sequence differentially expressed in response to a hepatotoxin #1374.
                                                                                     Rat; ss; hepatotoxin; expressed sequence tag; EST; drug screening; differential expression; centrilobular necrosis; steatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Elashoff MR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Castle AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Johnson KR,
                                                                                                                                                                                                                                                                                                                                                                            20010S-0290645P.
20010S-0290645P.
20010S-0295738P.
20010S-0297457P.
20010S-0297884P.
                                                                                                                                                                                                                                                                                                                                    2000US-0222040P
2000US-0244880P
                                                                                                                                                                                                                                                                                          30-JUL-2001; 2001WO-US023872
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Porter MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GENE-) GENE LOGIC INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-241625/29.
                                                                                                                                                           Rattus norvegicus.
                                                                                                                                                                                                  WO200210453-A2.
                                                                                                                                                                                                                                                                                                                                                                                11-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2001;
06-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-JUN-2001;
19-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-JUL-2001;
                                                                                                                                                                                                                                                                                                                                    31-JUL-2000;
02-NOV-2000;
18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mendrick D,
                                                                                                                                                                                                                                              07-FEB-2002
```

```
AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       102
                      Mendrick
  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                   TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGC 182
                                                                                                                                                                                                                                                                                     362
                                                                                                                                                                                                                                                                                                                                 422
                                                                                                           ATCTGGTAT----TTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                                                      CTCTGTCATTGGATTAACTTTTCTTTCTTGCTTGTTGGAATTGGAGTTGGATTATTTTG 444
                                                                                                                                                                          CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGGC 399
                                                                                                                                                                                                AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                        GAGCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 223
                                                                                                                                                                                                                                                                                                                                            CAGGICTITICATTATTITICTCCACAGCCAGAGGGICCTITIGATTITCCAAAAACCCAGG 163
                                                                                                                                                                                                                                                                                                                                                                                        GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTATTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT 542
                                                                                    AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 504
                                                                                                                                                                                                                                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGC 482
                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT 43
                                                                                                                                                                                                                                                                                    GAGGCCCGCAATTAGGGAAAAAAAGGCCCTGGGAAGCCCACTTTGCCATCTTACACTGGTC
                                                                7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                 CAGGICCTICATTATITIGICCACAGCCAGAGGGICTITITIGATITITCCAAAAATCCAGG
                                                                                                                                                                                                                                          Gaps
                                           24;
                     Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                profile; hepatotoxicity; liver;
 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
                     Score 329.2; DB 6; Length Pred. No. 4.9e-73; Indels 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             toxicity assay; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Toxicity-related gene, SEQ ID 3611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 33
ADB58585
XX
AC
ADB58585;
XX
ADB58585;
XX
TO4-DEC-2003 (first entry)
XX
TOXICITY-related gene, SEQ ID
XX
W TOXICITY-related gene, SEQ ID
XX
W TOXICITY-related gene, SEQ ID
XX
W TOXICITY-related gene, SEQ ID
XX
W TOXICITY-related gene, SEQ ID
XX
W TOXICITY-related gene, SEQ ID
XX
W TOXICITY-RELATED
XX
N TOXICITY-RELATED
XX
N TOXICITY SSSAY
XX
NOCO03064624-A2.
XX
PP 31-JAN-2003; 2003WO-US003194.
XX
PR 31-JAN-2002; 2002US-00060087.
PR 15-MAR-2002; 2002US-034065P.
PR 15-MAR-2002; 2002US-034065P.
PR 30-DEC-2002; 2002US-0436643P.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-00060087.
2002US-0364045P.
2002US-0364055P.
2002US-0436643P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression
                      27.5%;
                                al Similarity 78.2
455; Conservative
Sequence 573
                                                                                                          67
                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                     123
                                                                                                                                                                          443
                                                                                                                                                                                                                     398
                                                                                                                                                                                                                                                                                                          282
                     Query Match
Best Local
                                                                                                                                503
                                                                                                                                                                                                183
                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                     303
                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                      222
                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42
                                           Matches
                                                                                                                                                                    8 & 8
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                  a
                                                                                                         ò
                                                                                                                         ద
                                                                                                                                            કે
                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                        6 음
                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
The present invention relates to a method for predicting a toxic effect of a compound. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising SEQ ID 1-4925, where differential expression of the gene indicates at least one toxic effect. The method is useful for predicting at least one toxic effect of a compound, predicting hepatotoxicity or the progression of a toxic effect of a compound, identifying an agent that modulates the onset or progression of a toxic response, predicting the cellular pathways that a compound modulates in a cell, and identifying an agent that modulates at least one activity of a protein. The method and compositions of the present invention using a database of genes having liver toxin-induced differential expression, are useful in identifying toxicity markers in liver tissues or cells for drug screening and toxicity assays. Note: The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                          Predicting a toxic effect of a compound, useful in identifying toxicity markers in liver tissues or cells for drug screening and toxicity assays, comprises preparing gene expression profile of tissue or cells exposed to the compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              obtained in electronic format directly from WIPO
                                                                                      Σ
                                                                                 Elashoff
                                                                                      Castle A,
                                                                                      m,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              at ftp.wipo.int/pub/published_pct_sequences.
                                                                                 Higgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 3611; 1156pp; English
                                                                                 Johnson K,
(GENE-) GENE LOGIC INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         specification, but was
                                                                                      Porter M,
                                                                                                                                                                             WPI; 2003-689530/65
```

24; 27.5%; Score 329.2; DB 10; Length 573; 78.2%; Pred. No. 4.9e-73; rive 0; Mismatches 103; Indels 24; Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other; Query Match 27.5 Best Local Similarity 78.2 Matches 455, Conservative

Gaps

4;

Gaps

24;

504 122 444 182 399 242 343 302 283 362

```
toxicity; toxicity marker;
                                                                                                                                                                                                               503 CTCTGTCATTGGATTAACTTTTCTTTCTTTGTCGAATTGGAGTTGGATGTTATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563 AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                               67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                             123 TACATITIGCTAAGTGTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                             CACATTTCCTAAGGGTCCTGATCTGCTCA-------CAGGAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                              AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                                                                                                                                                                 342 CCAGTTGGCCTACTTCTTCTTCATGTGTACTACAAAAIAGTCATTGCATGCAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       282 GAGCCCCCCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22 CAGGICTITCATIATITIGICCACAGAGGGTCCTITIGATITICCAAAAACCCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                               7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCCATCTCTACACTGGTC
 toxicity modelling related gene sequence from the present invention.
                                                               Length
                                 Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
                                                              Score 329.2; DB 10; Length
Pred. No. 4.9e-73;
0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Foxicity modelling related rat gene SEQ ID No 1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Toxic effect; gene expression profile; renal toxio database; drug screening; toxicity assay; rat; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВР
                                                              27.5%;
illarity 78.2%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-MAY-2001; 2001US-0292335P.
13-JUN-2001; 2001US-0297523P.
19-JUN-2001; 2001US-0298925P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-MAY-2002; 2002WO-US016173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABT42181 standard; DNA; 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200295000-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-JUN-2003
                                                                                               455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-NOV-2002
                                                                                                                                                                                                                                                                                             443
                                                                                                                                                                                                                                                                                                                              183
                                                                                                                                                                                                                                                                                                                                                            398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  42
                                                               Query Match
                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
     SXS
                                                                                                                                                             엄
                                                                                                                                                                                             ò
                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method for determining whether a compound induces a toxic effect on a tissue or cell. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising data or information on the Tox mean and non-Tox mean value. The method is useful for predicting or identifying at least one toxic genes listed in the specification are useful as diagnostic or toxicity markers for the prediction or identification of the physiological state of tissue or cell sample that has been exposed to a compound, or to identify or predict the toxic effects of a compound or an agent. These may also be used as markers for monitoring toxicity progression or for drug screening. The present sequence represents a primary rat hepatocyte
                                                                                                                                                                                                                                            toxic effect; gene expression profile; hepatotoxicity; diagnostic marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Determining if a compound induces a toxic effect on a tissue or cell, for identifying hepatotoxic compounds, comprises comparing a gene expression profile of a tissue or cell sample to a database of Tox mean and non-Tox
                                                                                                                                                                                                          Primary rat hepatocyte toxicity modelling related gene SEQ ID NO:3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Orr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Castle A,
GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGACGCT 584
                                                                                                                                                                                                                                                             toxicity marker; toxicity progression; drug screening; primary rat hepatocyte toxicity modelling; gene; ds.
                                 ~
               GAAG-AATCTGTTGAAACCTGGGCCCTGAGGGGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Higgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 44; SEQ ID NO 3758; 874pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Х,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                 04-PEB-2002; 2002US-0353171P.
13-MAR-2002; 2002US-035334P.
08-APR-2002; 2002US-0370248P.
10-APR-2002; 2002US-0371134P.
10-APR-2002; 2002US-0371135P.
11-APR-2002; 2002US-0371150P.
11-APR-2002; 2002US-0371413P.
19-APR-2002; 2002US-0373602P.
22-APR-2002; 2002US-0373602P.
19-APR-2002; 2002US-0373602P.
09-MAY-2002; 2002US-0378652P.
09-MAY-2002; 2002US-0378652P.
09-MAY-2002; 2002US-0378652P.
09-MAY-2002; 2002US-0378652P.
09-MAY-2002; 2002US-0378653P.
09-MAY-2002; 2002US-0378653P.
                                                                                                                ΗB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0407688P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003US-0442900P
                                                                                                                standard; DNA; 573
                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOGIC INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Porter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-731472/69.
                                                                                                                                                                                                                                                                                                            Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                        WO2003065993-A2
                                                                                                                                                                                                                                                                                                                                                                                                        04-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mendrick D,
Elashoff M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mean values.
                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                          14-AUG-2003
                              42
                                                                                                  216/c
ADB53216
                                                                                                                                              ADB53216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENE-)
                                                                                             a
 ò
```

422

223

482 103 542

43

223

163 482 542

103

```
Identifying a voltage gated sodium channel (VGSC) modulator for producing analgesia and for relieving chronic pain, e.g. osteoarthritis or HIV pain, comprises bringing into contact a VGSC, a pl1 peptide and a test
                                                                                                                                                                                                         CAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       small calcium binding protein; analgesia; chronic pain; osteoarthritis; rheumatoid arthritis; neuropathic pain; cancer pain; tri geminal neuralgia; hyperalgesia; inflammatory pain; nociceptive pair tabes dorsalis; phantom limb pain; spinal cord injury pain; central pair post-herpetic pain; HIV pain; non-cardiac chest pain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to identifying a modulator of a voltage gated sodium channel (VGSC) e.g. Navl.8 comprising: (a) bringing into contact
                                                                                                                          GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                           GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                     162 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene; voltage gated sodium channel; VGSC; Navl.8; pll;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caac-aarcretricaaaccrececcreacecereca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rat cDNA encoding small calcium binding protein p11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Poon L, Wood JN, Malik-Hall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           irritable bowel syndrome; bowel disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 84-85; 114pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product= "p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  102/c
ABX13102 standard; cDNA; 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-AUG-2002; 2002WO-GB003852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-2001; 2001GB-00020238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UNLO ) UNIV COLLEGE LONDON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-278589/27.
P-PSDB; ABG76192.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Okuse K, Baker M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003016917-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAY-2003
                                                                                                                                                                                                         363
                                                                                        303
                                                                                                                                               282
                                                                                                                                                                                                                                                                                                                              423
                                                                                                                                                                                                                                                                                                                                                                                                                                               483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX13102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX13102/
XX ABX1
XX ABX1
XX ABX1
XX RAT;
XW RAT;
XW FRAT;
XW FOST
XW LADS
XW LYN
XX COS RAT
XX COS
                                                                                        ઠ
                                                                                                                                            셤
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel method of predicting at least one toxic effect of a compound. The method comprises a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising at least part of the data or information given in the specification. The methods are useful for predicting at least one toxic effect of a compound, predicting the progression of a toxic effect of a compound, predicting the progression of a toxic effect of a compound, predicting the renal toxicity of a compound, or identifying toxicity markers in tissues or consistive of a compound, predicting the renal toxicity of a compound, predicting the renal toxicity assays, in monitoring disease or physiological states, or disease progression. This polynucleotide represents a rat DNA sequence relating to the toxic effect database described in the specification. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in celectionic format directly from the World Intellectual Property
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTGGTAT ---- TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATTIGCTAAGIGICCTGATCTGCTCATGAAAICCTTCTAIGGGGGAAGCTGIGGGGC 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCATGCT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGATTCCTCAGTTGACCCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Predicting at least one toxic effect of a compound, useful for toxicity modeling, comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Elashoff
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 4.9e-73;
0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Castle A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Higgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 329.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      자,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 4; Page; 446pp; English.
                                                    10-JUL-2001; 2001US-0303810P.
28-AUG-2001; 2001US-0315047P.
27-SEP-2001; 2001US-0324928P.
22-OCT-2001; 2001US-0330865P.
01-NOV-2001; 2001US-0331868FP.
21-NOV-2001; 2001US-0331805P.
                                                                                                                                                                                                                                                          2001US-0340873P.
2002US-0357842P.
2002US-0357843P.
                                                                                                                                                                                                                                                                                                                                                                                     2002US-0364134P.
                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0370144P.
2002US-0370206P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27.58;
                                                                                                                                                                                                                                                                                                                                                   2002US-0357844P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0370247P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0372794P
2002US-0371679P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 78.2
1es 455; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Porter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENE-) GENE LOGIC INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             profile to a database.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-148464/14.
                                                                                                                                      22-OCT-2001; 2
01-NOV-2001; 2
21-NOV-2001; 2
06-DEC-2001; 2
19-DEC-2001; 2
21-FEB-2002; 2
                                                                                                                                                                                                                                                                                                                                             21-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                               15-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                         08-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mendrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183
```

g

ð

g

8

В

8 원

ઠે

pain; pain;

æ

CC VGSC, a pil peptide (a small calcium binding protein of the S-100 family)

and test compound (tc) so that the VGSC and the pil peptide can form a

CC complex in the absence of the (tc); and (b) mesauring an activity of the

VGSC, where a change in the activity of the VGSC relative to the activity

in the absence of the (tc) indicates that the (tc) is a modulator of

VGSC, where a cell by increasing the level of pil in the cell, a

CC GOMPOUND in a cell by increasing the level of pil in the cell, a

CC GOMPOUND in a cell by increasing the level of pil in the cell, a

CC GOMPOUND in a cell by increasing the level of pil in the cell, a

CC GOMPOUND in a cell by increasing the level of pil in the cell, a

CC GOMPOUND in a cell by increasing the level of pil in the cell, a

CC COMPOUND in the method a sexpression vectors within the cell),

CT Treating a disorder or condition associated with the activity of a

CC compound identified by the method above, or an inhibitor of pil activity

CC compound identified as medulator of VGSC are useful for manufacturing a

CC expression. The method is useful for identifying modulators of VGSC.

CC ompounds identified as medulator of VGSC are useful for manufacturing a

CC expression in the method as useful for identifying modulators of VGSC.

CC ompounds identified as medulator of VGSC are useful for manufacturing a

CC expression. The method is useful for identifying modulators of VGSC.

CC medicament for modulating the functional expression of a voltage gated

SCC compounds in the very pain, nociceptive pain, teabes dorsals, phancon limb pain,

CC pain, tri geminal neuralgia, primary and secondary hyperalgesia,

CC pain, tri geminal neuralgia, primary and secondary hyperalgesia,

CC pain, tri geminal neuralgia, primary and secondary hyperalgesia,

CC pain as osteoarthritis, rheumacoid arthritis, neuropathic pain, cancer

CC pain, tri geminal neuralgia, primary and secondary hyperalgesia,

CC pain a cord injury pain, cord:epiverse medicament pain associated with

CC power pai

Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;

182 399 242 302 422 482 542 504 444 343 283 362 GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCCACTTTTCCATCTCGGCACTGGTC 223 163 103 99 43 CAGGTCTTTCATTATTTTGTCCACAGGCGGCCCTTTTGATTTTCCAAAAACCCAGG cretigrearregarraacritricritricrecrigicaarregaarregarerrarrag TACATITIGCIAAGIGICCIGAICIGCICAIGAAAICCIICIAIGGGGGAAGCIGIGGGGC AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGACTGCTCATTTC AGATTCCTCAGTTGACCCCATGGGAGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T GAGGCCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT 7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 443 CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC Gaps 24; Score 329.2; DB 10; Length 573; 0; Mismatches 103; Indels 584 0 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGACGCT GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT Pred. No. 4.9e-73; 27.5**%**; 78.2**%**; Matches 455; Conservative Best Local Similarity 563 67 503 123 398 303 282 162 483 102 543 42 Query Match 183 363 222 423 g g g 셤 g ò ò 쉱 ò ઠે 셤 ò 엄 ò ò ò ò 8

BP ADP72563 standard; DNA; 573

(first entry) 26-AUG-2004 Renal toxin progression gene marker #1152.

differential gene expression; toxicity progression; toxicity marker; drug screening; toxicity assay; kidney pathology; nephritis; kidney necrosis; glomerular injury; tubular injury; focal segmental glomerulosclerosis. toxic effect; gene expression profile; kidney tissue;

Rattus norvegicus.

WO2004048598-A2

24-NOV-2003; 2003WO-US037556.

22-NOV-2002; 2002US-00301856

(GENE-) GENE LOGIC INC.

Ë Higgs Johnson KR, Castle A, Porter MW, Mendrick DL, Elashoff M;

WPI; 2004-460771/43.

Predicting (the progression of) a toxic effect of a compound, for monitoring the progression of renal disease states, comprises preparing gene expression profile of a kidney tissue or cell sample exposed to the compound

Claim 11; SEQ ID NO 1152; 266pp; English

The invention relates to a method of predicting (the progression of) a toxic effect of a compound by preparing a gene expression profile of a compound by preparing a gene expression profile of a database, or detecting the level of gene (s) gene expression in a tissue or cell sample exposed to the compound, where differential gene expression compared to a control indicates a toxic ceffect (toxicity progression). The method is useful for predicting (the progression of) at least one toxic effect of a compound. The genes are useful as toxicity markers in drug screening and toxicity assays. The ceptod are useful for predicting the likelihood that a compound or test agent will induce various specific kidney pathologies, such as nephritis, they necrosis, glomerular and tubular injury, or focal segmental capmental capmental ceptoderesis. The methods are useful for determining the similarity of a toxic response to one or more individual compounds and for predicting or modelling the potential cellular pathways influenced, induced or modulated by the compound or test agent. The kit is useful for predicting or modelling the progression of renal disease states, for identifying genes that show promise as new drug targets and for screening known and newly compared drugs. This sequence corresponds to a gene marker used in the method of the invention. (Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form part of the printed specification, but was obtained in electronic corresponse.

Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;

DB 12; Length 573; Indels 0; Mismatches 103; Pred. No. 4.9e-73; 27.5%; Score 329.2; 78.2%; Pred. No. 4.90 Matches 455; Conservative Best Local Similarity Query Match

ð 임 ò

67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTT 122

RESULT 37 ADP72563/c

ö

Gaps

ö

258

154

214 138 274

78

334

```
TTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGA 198
proteins. The sequences of the invention are useful in pharmaceutical compositions and vaccines for the prevention and treatment of cancers such as colon cancer. They are also useful for the diagnosis and monitoring of such cancers. Antibodies to the colon tumour proteins and santigen presenting cells that express polynucleotides encoding colon tumour proteins can be used to inhibit the development of cancers. Temporing tumour cells from samples (e.g. blood) and for cancer treatment. The polynucleotides sequences are also useful in gene therapy. AAS59880 represent the cDNA sequences of the invention that encode for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             $100 protein; human; treatment; cardiomyopathy; cardiac insufficiency; calcium-binding protein; calcium homeostasis; cardiac muscle; pumping oapacity; myocardial cell; systolic calcium ion release; sarcoplasmic reticulum; cardiac disease; hypertension; rhythm disorder; valve defect; ss.
                                                                                                                                                                                                                                                                      TATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTA
                                                                                                                                                                                                                                                                                                             TTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGA
                                                                                                                                                                                                                                                                                                                                                                                              197 AATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACAAAAATAGTCATTGCATGCAATTGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGA
                                                                                                                                                                                                                                                                                                                                                                    AATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                          TATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTCCCTTCTGCTTCATGTGTA
                                                                                                                                                                                                                                                    GGGGATGCAAACAATACAAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                              Length 318;
                                                                                                                                                                                                                          Indels
                                                                                                                                                                    Sequence 318 BP; 102 A; 67 C; 67 G; 82 T; 0 U; 0 Other;
                                                                                                                                                                                             26.4%; Score 317; DB 4; I
100.0%; Pred. No. 4.8e-70;
tive 0; Mismatches 0;
                                                                                                                                          portions of human colon tumour proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCCACTTTGCCATCT 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCCACTTTGCCATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC81810 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remppis A;
                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human S100A10 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KATU/) KATUS H A. (REMP/) REMPPIS A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DE19915485-A1
                                                                                                                                                                                             Query Match
Best Local Simil
Matches 317; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Katus HA,
                                                                                                                                                                                                                                                      35
                                                                                                                                                                                                                                                                                317
                                                                                                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                                                                                         257
                                                                                                                                                                                                                                                                                                                                                                    155
                                                                                                                                                                                                                                                                                                                                                                                                                          215
                                                                                                                                                                                                                                                                                                                                                                                                                                                    137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC81810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       886666666666888888
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                          음
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                             362
                                                                                                                                                                                                                                                                                                                          482
                                                                                                AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                     GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCCACTGGTC : 223
                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                         542
                CTCTGTCATTGGATTAACTTTTCTTTCTTGCTTGTCGAATTGGAGTTGGATGTTATTTG 444
                                                                                                                          AGATTCCTCAGTTGACCCCATGGGAGAGGAGGCCATCAAGGTGTGGGTACCAGGGC----T 343
                                                                                                                                                                                                                                                                                             CAGGICTITICATIATITIGICCACAGAGGGGCCCTTITIGATITICCAAAAACCCAGG 163
                                                                                                                                                                                                                                                                                                                                                                                                AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCCATTTGGGATGGCATTTT 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid, useful for treatment, of cancer.
                                        TACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                     ------cagaaacacrecec
                                                                                                                                                    GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                   CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                GAATTIGIGAAATGIAAACAICAIGGITTICCAIGGCGIGITCCAITIGAGAIGGCAITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Th present invention relates to the isolation of novel cDNA sequences encoding for at least an immunogenic portion of human colon tumour
                                                                                                                                                                                                                                                                                                                         GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; colon tumour protein; colon cancer; gene therapy; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA #86 encoding portion of a human colon tumour protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
CACATTTCCTAAGGGTCCTGATCTGCTCA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New colon tumor proteins and related prevention, diagnosis and monitoring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 75; 299pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS57410 standard; cDNA; 318 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-MAR-2000; 2000US-0191597P.
04-MAY-2000; 2000US-0202024P.
05-MAY-2000; 2000US-020189P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAR-2001; 2001WO-US009246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Œ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            King
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-611627/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200173027-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Meagher MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-OCT-2001
                                                                                                                          398
                                                                                                                                                                                342
              503
                                          123
                                                                    443
                                                                                                183
                                                                                                                                                    243
                                                                                                                                                                                                           303
                                                                                                                                                                                                                                       282
                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                             222
                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                                                                    162
                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAS57410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 38
AAS57410/
                                                           음
                                                                                     ð
                                                                                                                염 상 염
                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                                                                    8
6
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
```

```
Georgiany cardiomyopathy or cardiac insufficiency contains at least one slow protein (1) or nucleic acid (11) encoding (1), or their mutants or fragments, or a gene transfer vector containing (11), optionally formulated with auxiliaries and/or cardiers. (1) are calcium-binding proteins involved in calcium homeostasis, so their overexpression in cardiac muscle will improve pumping capacity (and overall capacity) of the heart. In cultured myocardial cells they increase the contraction and relaxation rates associated with increased systolic calcium ion release from the sarcoplasmic reticulum (SR) and calcium re-uptake by SR. (1) are used to treat cardiomyopathy (CMP) where inherited or caused by spontaneous mutations and ischemic CMP caused by arteriosclerosis, dilative CMP caused by toxic/infectious disease, cardiac disease caused by pulmonary and/or arterial hypertension, and structural disease caused by rhythm disorders or valve defects, generally any condition associated with reduced contractile force. Unlike calmodulin, which is expressed ubjequitously, (1) show tissue-specific expression and treat the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGCAATGGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GICCTICATIAITITGICCACAGCCAGAGGGICTITITIGATITITCCAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grecificalitatifitaticacacaccacacacacactifitatifitatifitatiani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              underlying defect in the sarcoplasmic reticulum (SR) that causes cardiac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-anglogenesis plasmin fragment; plasminogen; plasminogen activator; plasmin reductase; reduced plasmin protein; anti-anglogenesis activity; urokinoase-type plasminogen activator; A61; annexin II heterotetramer; annexin II p36 subunit; annexin II p11 subunit; thioredoxin; protein disulphide isomerase; modulating anglogenesis; mammalian; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGCAATGGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCCGCAATTAGGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTTTTAAGTAGCCTTTATCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                        Composition containing S100 protein, corresponding nucleic acid or vector, useful for treating cardiomyopathy and cardiac insufficiency
                                                                                                                                                                                                                                                                                                                      This invention describes a novel composition for treating primary or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalian annexin II pl1 subunit antisense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 294 BP; 96 A; 57 C; 72 G; 69 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 294; DB 3; I
Pred. No. 3.1e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24.5%; Scor.
100.0%; Pred. No. J...
0; Mismatches
                                                                                                                                                                                                                                                Claim 36; Page 17; 36pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADA08452 standard; DNA; 291 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                        2000-673510/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                 WPI; 2000-6/3310,
P-PSDB; AAB45540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADA08452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADAO8452
XX
AC ADAC
XX
XX
DT 06-1
XX
XX
DD Mamm
XX
KW ANT:
KW UND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
```

```
The present invention relates to a method for producing an anti-
angiogenesis plasmin fragment. The method comprises contacting a
plasminogen polypeptide with a plasminogen activator and a plasmin
reductase, where a reduced plasmin protein is produced and the anti-
angiogenesis plasmin fragment having anti-angiogenesis activity, is
released from the reduced plasmin protein. The plasminogen activator is
preferably a urokinase-type plasminogen activator. The angiogenesis
plasmin fragment is AG1. The plasmin reductase is selected from annexin
II heterotetramer, annexin II p36 subunit, p11, thioredoxin, and protein
disulphide isomerase. The annexin II heterotetramer is associated with a
cell membrane. The method of the invention is useful for modulating (e.g.
promocing or inhibiting) angiogenesis. The present sequence represents
mammalian annexin II p11 subunit antisense polynucleotide.
                                                                                                                                                                                                                                                                              Producing an anti-angiogenesis plasmin fragment, useful for modulating, e.g. promoting or inhibiting angiogenesis, comprises contacting a plasminogen polypeptide with a plasminogen activator and a plasmin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             249 CTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGGTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cricarrarringrecaeaeceaeaeesrerringarrineaaaaareeaeeaaeere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              crrrrccardadracrcrcaderccrcrrrigrraagradccrrrarccccagcdaarrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GIGAAATGIAAACAICAIGGITIICCAIGGCGIGIICCAIIIGAGAIGGCAI 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 291; DB 9; Length 291;
Pred. No. 1.8e-63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 291 BP; 68 A; 71 C; 57 G; 95 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalian annexin II p11 subunit sense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24.3%; Sco...
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                    Claim 33; Page 12; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                     28-NOV-2001; 2001US-0333866P
                                                                                    26-NOV-2002; 2002US-00304287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA08453 standard; DNA; 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.
Matches 291; Conservative
                                                                                                                                                                                                                                             WPI; 2003-596985/56
                                                                                                                                                                                                            Kwon M;
                                                                                                                                                        (WAIS/) WAISMAN D.
                US2003083234-A1
                                                                                                                                                                           KWON M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-NOV-2003
                                                   01-MAY-2003
                                                                                                                                                                                                            Waisman D,
                                                                                                                                                                                                                                                                                                                                     reductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADA08453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                           KWON/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA08453,
BXAXAXB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

ò

180

488 240

120 428

368

```
ö
                                                                   CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC 172
                                                                                                                                                                                                        CITCATTATTITGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC 428
                                                                                                                                                                                                                           CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC 112
                                                                                                                                                                                                                                                                           CTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT 488
                                                                                                                                                                                                                                                                                                           52
                                                                                                                                      CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                             CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATTT
                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                              GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                  GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 1
Length 291;
                               0; Indels
24.3%; Score 291; DB 9; 1
100.0%; Pred. No. 1.8e-63;
ive 0; Mismatches 0;
Query Match 24.3
Best Local Similarity 100.
Matches 291; Conservative
                                                                   249
                                                                                                                                                                      231
                                                                                                                                                                                                        369
                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                         429
                                                                                                                                                                                                                                                                                                           111
                                                                                                                                                                                                                                                                                                                                             489
                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                             51
                                                                                                                                                               g
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                         원
                                                                                                   요
                                                                                                                                    ò
                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                             8
```

```
The present invention describes a composition (I) which modulates the activity of a p11 protein and effects a change in the level of activity of a p11 protein and effects a change in the level of lasminogen activation by a cell. Also described: (1) making (M1) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein is involved in plasminogen activation; and (2) a cell, where the protein is involved in plasminogen activation; and (2) a clonal cell line (II) useful in the identification of composition that modulate p11 activity, where the clonal cell line is obtained by (M1).

(I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 (I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 (I) to a cell. The cell can be a human cancer cell and a CCL-22 colorectal adenocarcinoma cell. (I) is also useful for reducing the development of cancer cell in the patient. (I) is also useful for inhibiting the growth of tumours or inhibiting tumour cell involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates p11 activity which involves administering the composition to (II) obtained by (MI), determining the change in p11 activity of a cell of the clonal cell line relative to a cell of a clonal cell line that had not received the composition, and cell of a clonal cell line that had not received the composition, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           identifying the composition that produces a change in pil activity. The change in pl activity is a change in the level of plasminogen activation activity. The present sequence represents a human pl1 antisense polynucleotide sequence (antisense to ADD67425), which is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Composition useful for inhibiting growth of tumor in patient, modulates activity of pl1 protein and effects change in level of plasminogen activation by a cell.
                                                                                                                                                                p11; p11 activity modulator; plasminogen activation; cytostatic;
antisense therapy; cancer; tumour; tumour growth inhibition; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24.3%; Score 291; DB 12; Length 291;
llarity 100.0%; Pred. No. 1.8e-63;
Conservative 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 291 BP; 68 A; 71 C; 57 G; 95 T; 0 U; 0 Other;
                                                                                                                       Human p11 antisense polynucleotide SEQ ID NO:5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 5; 140pp; English.
  BP.
                                                                                                                                                                                                                                                                                                                                                                                                             13-DEC-2002; 2002US-0433140P.
standard; cDNA; 291
                                                                                                                                                                                                                                                                                                                                                                       12-DEC-2003; 2003WO-US040029
                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-487995/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                      gene; ss; human
                                                                                                                                                                                                                                                                                       WO2004054517-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Simi
Matches 291;
                                                                                                                                                                                                                                                   Homo sapiens
                                                                                 23-SEP-2004
                                                                                                                                                                                                                                                                                                                                01-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Waisman D;
                                      ADP67424;
  ADP67424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249
                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

ö 308 232 368 172 428 112 488 52

Gaps

;

```
cancer in a patient e.g., mouse which involves administering (I) to a cancer cell in the patient. (I) is useful for inhibiting the growth of rumours or inhibiting tumour cell invasion in a patient, which involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates pll activity which involves administering the composition to (II) otherwise the involves change in pll activity of a call of the clonal cell line that had not received the composition, and identifying the composition that produces a change in pll activity is a change in the level of plasminogen activity. The change in pll activity is a change in the level of plasminogen activity in activity. The present sequence represents a human pll sense
                                                                                                                                                                                                                                                                                                                                               CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 231 CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  171 CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                             111 CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Probe #57 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    489 GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 1
                                                                                                                                                                                                                                                                         / Match 24.3%; Score 291; DB 12; Length 291; Local Similarity 100.0%; Pred. No. 1.8e-63; les 291; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                             Sequence 291 BP; 95 A; 57 C; 71 G; 68 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chen W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-00608408.
2000US-00632366.
2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0180312P.
2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAI10124 standard; DNA; 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cervical cancer; ss
                                                                                                                                                                                                            present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200157278-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAI10124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  369
                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Probe:
                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                             염
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a composition (I) which modulates the activity of a p11 protein and effects a change in the level of plasminogen activation by a cell. Also described: (1) making (M1) a close since the activity of a protein produced by the cell or closal progeny of the activity of a protein produced by the cell or closal progeny of the cell, where the protein is involved in plasminogen activation, and (2) a closal cell line (II) useful in the identification of composition that modulate p11 activity, where the closal cell line is obtained by (M1).

(I) has cytostatic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of p11 which involves administering useful for modulating the activity of p1 which involves administering (I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 fibrosarcoma cell, a LNCaP prostate cancer cell and a CGL-22 colorectal adenocarcinoma cell. (I) is also useful for reducing the development of
                                      120
                                                                         428
                                                                                         CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC 180
                                                                                                                                          488
                                                                                                                                                           CTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATTATCCCCCAGCGAATTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Composition useful for inhibiting growth of tumor in patient, modulates activity of pll protein and effects change in level of plasminogen activation by a cell.
                          CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             pl1; pl1 activity modulator; plasminogen activation; cytostatic; antisense therapy; cancer; tumour; tumour growth inhibition; gene; ss;
     CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                       CTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                          CTITICCAIGAGIACICTCAGGICCTCCTITGIIAAGIAGCCIITAICCCCAGCGAAITI
                                                                                                                                                                                                            539
                                                                                                                                                                                                                                             291
                                                                                                                                                                                                                              GTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                            GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                Human p11 sense polynucleotide SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 6; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
1. .291
                                                                                                                                                                                                                                                                                                                              ADP67425 standard; cDNA; 291 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
/product= "p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-DEC-2002; 2002US-0433140P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-DEC-2003; 2003WO-US040029
                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIOMICS LLC.
WAISMAN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-487995/46.
P-PSDB; ADP67422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2004054517-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Waisman D;
     309
                                      61
                                                                       369
                                                                                                                                        429
                                                                                                                                                                           181
                                                                                                                                                                                                          489
                                                                                                                                                                                                                                          241
                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                             ADP67425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MEDI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (WAIS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human.
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                g
                                                                     ò
                                                                                            8
                                                                                                                             ò
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                   g
      ठ
```

Thu Aug

```
Search
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          415
                                   Human genome-dbrived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                      CTAT 165
                                                                                                                                                                                                                                                                                                                                                                                                                           225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                  GATTTGGATTTGATGTGTCTGTTTTCTTGGC--CCTGGTCTGCTCATGAAAGCCTTCTAC 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGGGAAGCTGTGGGCAGGTTCCTATAGCGACTCTTTGGGAGAACTCTCACAGGGCTG- 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -AGTAATTGCTTAGTTCTGCCTGCTTCGTTCCCTTCTGCTTCATAGGTACTACAAATAG 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rrerrerceacacidareaccececacidadeacaaaacaacrecaaacrecaacrecage 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crefetrescaerestecarstecricatratarateressassassassecritarias 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAG 465
                                                                                              The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; foetal liver; gene expression; single exon nucleic acid probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                          GGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Trerceaaaarceaaggaerecrireccargaeracrireaggecerecricarraag
                                                                                                                                                                                                                                                                                                                                              CAATCCAAAGACCAAAAGCCTATTATTTAAC-TTCCTTTCTTTGCTTGTTAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGA
                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                        GAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCT
                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4; Length 464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCA
                                                                                                                                                                                                                                          Sequence 464 BP; 105 A; 108 C; 101 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                  22.8%; Score 273.8; DB 4; Length llarity 78.3%; Pred. No. 4.9e-59; Conservative 0; Mismatches 97; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acid
                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                        Claim 25; SEQ ID NO 57; 487pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    liver single exon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABAS1754 standard; DNA;
                                                                                                                                                                                                                                                                                 al Similarity
367; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200157277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     foetal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-2002
                                                                                                                                                                                                                                                                                                                       46
                                                                                                                                                                                                                                                                                                                                                                       106
                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   466
                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           416
                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABA51754
g
                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PXSXXXXXXXXX
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   숭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
```

```
The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTAT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Trefecaaaarecaaggaacrecrrreceargagraerreaggecerecrrearga 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTCTTGGCACTGGTCCATGTCCTTCATTGTTATGTCTGCAGCCAGAGGGTCTTTTTGA 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATITGGATITGATGTCTGTTTTCTTGC--CCTGGTCTGCTGTAGAAAGCCTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGTTGTCCACAGTGGTGAGCCCCGCAGTGAGTAAACAAGTTCTGGAAGTTCAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - AGTAATTGCTTAGTTCTGCCTGCTTCGTTCCCTTCTGCTTCATAGGTACTACAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATACAAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTTTTCTTCTGTGTTGAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aggegaagereregegeagerrecharaeceaererrregeagaacrereaegegre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              226 AGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICCAAAAATCCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGCCTTTATCCCCGGCAAATCTGTGAAACGTAAACAACACGGTTTCCA 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 genome-derived single exon nucleic acid probes useful expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 464 BP; 105 A; 108 C; 101 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 59; 639pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22.8%; Score 273.8; DB 4; 78.3%; Pred. No. 4.9e-59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                            Щ;
                                                                                                                                                                                                                                                                                                                                                                            Rank
                                                                                                                                                    2000US-00608408.

2000US-00632366.

2000US-0234687P.

2000US-0236359P.
                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                            30-JAN-2001; 2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                            DK,
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-483447/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                            Hanzel
                                                                                                                                                       30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                        27-SEP-2000;
                                                                                                                                                                                                                                                                  04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Sim:
Matches 367;
                                                                                                                              26-MAY-2000
09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      416
                                                                                                                                                                                                                                                                                                                                                                            Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human
```

117 225

29

285

235

176

345 295

405

465

completed: August 18, 2005, 03:59:11

Job time : 684 secs

at30b06.x AGENCOURT

K-EST0050 K-EST0119 AGENCOURT

170006000 602858171

AGENCOURT AGENCOURT 602404165 AGENCOURT K-EST0218

OM nucleic

Run on:

Sequence:

```
/u. 'Jone 'mRNA''

/mol_type="mRNA"

/mol_type="mRNA"

/db_trafe="taxon:9606"

/clone="twage:516965"

/clone="twage:516965"

/clone="twage:516965"

/clone="twage="medula"

/lab host="mHH MGC_119"

/clone="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI;

/note="Organ: brain; Vector: bibrary is oligo-dr primed and directionally cloned (BCoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range

0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    603077308F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5169265 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria, Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 753)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contract: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI1420 row: p column: 02
High quality sequence stop: 753.
BG335520
CA431436
BF686811
BE745512
BB745512
BB745512
BB74536
CA412335
CA412335
BB7479536
BB7679995
BB7679995
BB767559
BB76759
BB767559
BB76759
BB7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                    BQ948995
BI093074
CN271600
BM767559
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM842132
BU860855
BQ943717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3M461859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI827113.1 GI:15938663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .753
   631.4
630.8
628.6
628.6
628.7
628.7
628.7
627.8
625.6
625.8
625.8
625.8
621.4
625.8
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
BI827113/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
      ORIGIN
                                                                     0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BX362846
AGENCOURT
AGENCOURT
602437371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                602662641
601564949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601236785
AGENCOURT
                                                                                                                                                                                                                    August 17, 2005, 23:46:33 ; Search time 3771 Seconds (without alignments) 12102.641 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI827113 603077308
BG437145 602488791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CD389775 AGENCOURT
BM785208 K-EST0063
BU521490 AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   full-leng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   602430639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                     1 ggaactaaaaaagaacttta.......gggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BG774775
CR6107901
BX362846
BX362846
BX362846
BC3779
BC339527
BC339527
BUS94774
BUS94774
BUS94774
BUS94774
BUS94774
BUS94774
BUS94774
BUS94774
BUS94774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BQ073203 I
BM549820 I
BI825167 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BU602356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BQ050753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68479088
                                 GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34239544 segs, 19032134700 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        summaries
                                                                                                                                                        nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CD177393
BQ646470
BG339527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BU183451
BQ678300
BG332809
BU502376
BU602356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG774775
BE729901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CR610742
BX362846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BM541317
BU594774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BG437145
CD389775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BE378444
BQ050753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BM549820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31825167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM785208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BU521490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI827113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                        US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gb_est1:
gb_htc:
gb_est3:*
gb_est4:*
gb_est6:*;
gb_gs81:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              555.7
555.3
54.9
54.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53.99
53.99
53.99
53.99
53.99
53.99
53.99
53.99
                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 694.8
688.2
668.2
668.2
668.2
668.6
665.3
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
657.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640.6
638
636.2
634.4
634
```

Minimum DB Maximum DB

Database

Result

Searched:

g

ò g 8

g ð 유 ò g ઠે d à g ò Q ò g ò g ò g

```
Tissue rype=mann: Dury/Dury/agadar

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

Clone distribution: MGC clone distribution

http://image.llhl.gov

Plate: LLCM1382 row: f column: 23

High quality sequence stop: 750.

High quality sequence stop: 750.

I. . 769 mile "Homo sapiens"

// Molete "Hong sepiens"

// Alb_Arge="HankA"

// Alb_Arge="HankA"

// Alb_Arge="HankA"

// Alb_Arge="HankBa"

//
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTGTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACTICITICCCTICIGCTICATGIGIACTACAAAAAAGICATIGCAATGGIGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGCGAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAAAGACTTATTTATTGAGGGCAAGGNGATGCAGACCATACCAAAATCAGAAGCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTATTTAACTTTTC-TTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT-TTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGTATTTAACTTTTCGTTTCTCTGTCCTTGTCCAATGAGAGTTAGATTTTATGTTGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGCTAAGTGTCCTGATCTGCTCATGAATCCTTCTATGGGGGAAGCTGTGGGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCC-TTCATTATTTTGFCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCGTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGIGAAATGIAAACATCATGGITTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGACGCTGGGCGAGCTGGACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAAATCAAAAGCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57.4%; Score 688.2; DB 4; Length 769;
llarity 97.7%; Pred. No. 2.1e-157;
Conservative 0; Mismatches 14; Indels 3
   Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP/Gazdar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
tes 729; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                       Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                     FEATURES
          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGCGGCCACCTACGGGTCTAGGAATTAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1046 TTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAGTCCTATCGACCTCAGAGGCACTATC 1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGGCGGCCTGCGCCAGTGGAGGGGCGGC 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BG437145 769 bp mRNA linear EST 14-MAR-2001
602488791F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4620694 5',
                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                   625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGCATTTGTGGAAATGTACACATCATG 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACCCGCCTCGCAGAGGCCTCGCCCGCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTC 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCC 275
                                                                                                                                                                                                                                                                                                                               GTTTCCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGTC 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 769)
MIH-MOC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTCCTGCCCCCGACTCCCCGGACCCCGGGCGCGCGCCCACGCCCTGCCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGG
                                                                                                                                 GGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGT-GAAATGTAAACATCATG
                                                                                                                                                                                                                                                                  GTTT-CCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGCTCCGTTGAAGCCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                cceccecrererecerricerraciaeracerececereceraceaeaeaeaeaeaeaeae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCGGGAGGAGCCTGGCGGCGCTCGGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGGGGAGGCTGGGGGGGCTCGGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGACCCGCCTCGCAGAGGCCTCGCCCCCCAGACAGAGCGTTCTTGTAAACTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154 TTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAGTCCTATCGACCTCAGAGGCACTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 AGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGGCGGCCTGCCCCAGTGGAGGGGGCGGC
                                                                          Gaps
                                                                       4;
      Length 753;
                                                                    Indels
      DB 4;
                                                                       7 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
Score 694.8; DB 4;
Pred. No. 5.1e-159;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Accreccada Accede crrece ececeda con Accrece and Accrete and Accre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:13343651
      57.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                             Matches 743; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
BG437145
BG437145.1 GI:
                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1166
                                                                                                                                    449
                                                                                                                                                                                                                                                                                                                                                                                            267
                                                                                                                                                                                                                                                                                                                                                                                                                                                             633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           986
                                                                                                                                                                                                                                                                  508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34
      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2
BG437145/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
```

임 ò

ò

466 300

엄

ઠે

g 8

```
BM785208 679 bp mRNA linear EST 05-MAR-2002
K-EST0063546 S13KMS581 Homo sapiens CDNA clone S13KMS581-2-G09 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 346
                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                        345 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 286
                                                                                                                                                                                                                                                                                                                                                                         421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                               285 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATCCCCA 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             225 GCGAATTTGTGAAAAGTTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   165 Tregretatecerreaacerresceaececeaececeaececeaeceaeceae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGACGCTGGGCGAAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105 CTGGACGCGGGGCGGAGACGCGAGCGCGGCGCTGTGCGCTTCCTTAGTACGTGCGGC 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                       525 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contract: Aim 15
Genome Research Center

Korea Research Institute of Bioscience & Biotechnology
52 Exeun-dong Yuseong-gu, Daejeon 305-333, South Korea
51 Exeun-dong Yuseong-gu, Daejeon 305-333, South Korea
51 +82-42-860-4470
Fax: +82-42-860-4470
Email: yongsung@mail.kribb.re.kr
Plate: 2 row: G column: 09
Plate: 2 row: G column: 09
Plate: 2 row: G column: 09
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
mol_type="mRNA"
db_xref="taxon:9606"
/clone="$13KM$5$1-2-609"
/tissue_type="myeloma"
/cell_line="KM$-5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGTGGGTAGAGGGAGGCGCGCGGGA 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ecercecracaceaececececeda 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BM785208.1 GI:19133440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
BM785208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
  181
                                                                                           241
                                                                                                                                                                                  301
                                                                                                                                                                                                                                  405
                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
BM785208/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                 g
                                                                                           ð
                                                                                                                             g
                                                                                                                                                                                ò
                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo saptems

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I. (bases I to 883)

S. I. (bases I to 883)

Mational Institutes of Health, Mammalian Gene Collection (MGC)

L. (bases I to 800)

Mational Institutes of Health, Mammalian Gene Collection (MGC)

Contact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics

National Cancer Genomics

National Cancer Institute / NIH

Bldg. 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-remail.nih.gov

Tissue Procurement: Dr. Jamie Thompson, University of WI

CDNA Library Preparation: Gina Zastrow-Hayes

CDNA Library Preparation: Gina Zastrow-Hayes

CDNA Library Arrayed by: The I. M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: NDKM72 row: e column: 19

High quality sequence start: 8

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                               CD389775 883 bp mRNA linear EST 30-MAY-2003 AGENCOURT_14305360 NIH_MGC_173 Homo sapiens CDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
    665
                                                                                      666 GGTAGAGGGAGGGGGGGAGCGGGAGCCTGGCGGGGGGGCGCTCGGCAGGGCGCTCCC 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       585 TTTACATTIGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGIGGG 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tissue_type="embryonic trophoblasts, made from WA01 stem/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGGTGGTAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 TITACATTIGCTAAGIGICCIGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                      146 CGCGGGGGGGAGAGCGCGGCGGCTGTGCCCCTTCCTTAGTACGTGCGCGGGTG 87
                                                                                                                 86 GGTAGAGGGAGGCGCGCGGGAGGGGGAGCCTGGCGGGCGCTCGGCAGGCGCTCCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="NIH_MGC_173"
/note="Vector: pDONR201; Site 1: attP2; Site 2: attP1;
LIBR_PRINING - oligo dT; METHÖD - full-length enriched;
LIBR_PROVIDER - Bradfield"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57.3%; Score 687; DB 6; Length 883; 100.0%; Pred. No. 4.3e-157; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                  CCAGCCCTGTCTCCTCCCCTTTCC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cells" _____/lab_host="DH10B TonA"
                                                                                                                                                                                                          CCAGACCTGTCTCCTCCCCTCTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               687;
                                                                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S:
Matches 687
909
                                                                                                                                                                                  726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                   RESULT 3
CD389775/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
```

요

g

ò

ò

σ

```
bublished linear EST 13-SEP-2002 AGENCOURT 10152991 NIH_MGC_71 Homo saplens cDNA clone IMAGE:6527353 5... mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   486 GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue type="leiomyosarcoma" /lab_host="DH10B (phage-resistant)" /clone_lib="NHH MGC 71" /note="organ: uTerus; Vector: pCMV-SPORT6; Site_l: NotI; Site_2: Sall; Cloned unidirectionally. Primer: Oligo dr. Average insert size 2.1 kb. "
Eukaryotta.

Bukaryotta.

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

I (bases 1 to 681)

NIH-WGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               666 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                 1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   606 AAGCTTATCTGGTATTTAACTNTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 TITACATITGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              546 TTTACATTTGCTAAGTGTCTCCTGATCTGCAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can l
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM14124 row: c column: 01
High quality sequence stop: 624.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55.5%; Score 665; DB 5; Length 681; 99.8%; Pred. No. 1e-151; Lindels or Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6527353"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BU521490.1 GI:22829016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .681
                                                                                                                                                                                                                            661 GGGTGGGT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                      GGGTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BU521490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
BU521490/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                           염
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                    ò
                                                                                                                                                                                                                         à
                      /done lib="8134MS581"
// floor lib may be seen the floor lib may be seen the phosphatase (TAP). The decapped with tabacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including EcoR 1 site by treatment of from oligo dT-selected mRNA by priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of EcoRI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli Top10F' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library. After analyzing and sequencing about 2,000 - 3,000 colonies in original cDNA library, the abundant cDNA see selected and amplified by PCR reaction using vector region primer including T? promotor as 5' primer and N(dT)14 as 3' primer. The PCR products were used as template for synthesis of biotinylated single stranded by in vitro transcription reaction. The synthesized RNA probes were hybridized with antisense single stranded cDNA propared from original liberary and included of the cDNA propared from original hybrid and by his hybrid and sequencing and probated from original hybrid and by his hybrid and hybrid hyb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITACAITITGCTAAGTGTCCTGAICTGCTCATGAAAICCTICTAIGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rccaggrccrrcarrarrirgrccacaggccagagggrcrrrrrgarrrccaaaaarcca 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         avidin-gel. After removing DNA-RNA hybrids by centrifuge, the subtracted cDNA libraries were constructed by transformation of the remaining DNA into competent cells coil Top10F' with electroporation method."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAGAACTTTATTTATTGGGCCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55.7%; Score 668; DB 4; Length 679; 100.0%; Pred. No. 1.8e-152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Prea. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 668; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
```

g ò 유 상

þe

ö

.. 0

8 6 8

8 8 8 8

g

ò

ò

셤

ò g

120

547

607

180

ö 309

ö

612 369 552 429 492 489

g

8 셤 8 셤

상 원 ò 432 549 372

312

609

252

729

699

192 789 132 849 606

12

72

us-10-735-577-16.rst

g B &

8 6 8 6

```
for average insert size 1.8kb. Library constructed by Ling Hong in the Laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BE729901 912 bp mRNA linear EST 15-SEP-2000 601564949F1 NIH_MGC_20 Homo sapiens cDNA clone IMACE:3925932 5', mRNA sequence.
BE729901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGCGGAGAGGCGCGGCGGGCTGTGCTTCCTTACTACGTGCGCGGGGGGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGAGCGGTGCGGGAGCGGGAGGAGCCTGGCGGGCGCTCGGCAGGCGCAGGCCCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGGAGCGGCGCGCGCGCGAGCGGAGCCTGGCGGGCGCTCGGCAGGGCGCTCCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCCCCCCGGACAGAGCGTTC
                                                                                                                                                                                                                                       GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCC
                                                                                                                                                                                                                                                                                                                                                                          GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTACACTGGTCCAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCTGGACGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Butele
mamalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 912)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                          Length 671;
                                                                                                                                                                                      Indels
                                                                                                                                        Score 663; DB 4; I. Pred. No. 3.1e-151; 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BE729901.1 GI:10143893
                                                                                                                                        55.3%;
llarity 99.3%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIGAGCCIGCC 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grandccracc 1
                                                                                                                                                                Local Similarity
les 666; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST.
                                                                                                                                                                                                                                       250
                                                                                                                                                                                                                                                                                   671
                                                                                                                                                                                                                                                                                                                                 310
                                                                                                                                                                                                                                                                                                                                                                               611
                                                                                                                                                                                                                                                                                                                                                                                                                              370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11
                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
BE729901/c
LOCUS
                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BG774775 671 bp mRNA linear EST 15-MAY-2001
602662641F1 NIH_MGC_21 Homo sapiens CDNA clone IMAGE:4811026 5',
                                                                                          GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                           420
                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGAGAGGTCTTTTTGATTTTCCAAAAATCCA 247
                                                                                                                                                                                                                                                                                   480
GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIGGIGIGCCGITGAAGCCITGGCCGAGGCGCGGCGGACGCIGGGCGAGCIGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGACGCGGGCGGAGGCGCGCGGCGGCTGTGCGCCTTTCCTTAGTACGTGCGCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clower=lwace.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.downord=lands.do
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (basea 1 to 671)
NH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGGGAGGCGAGCGCGGGCGGCTGTGCTTCCTTAGTAGTACGTGCGCC 7
                        TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           рe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL) DNA Sequencing by: Incyte Genomice, Inc. Clone distribution: MGC clone distribution information can lettp://image.llni.gov http://image.llni.gov Plate: LiccMi668 row: a column: 11 High quality sequence stop: 666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .671
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence. _ _ BG774775
BG774775.1 GI:14045092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGTGG 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||||||
GGGTGG 1
                                                426
                                                                                                                                        366
                                                                                                                                                                                                                                                                                                                                 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                              301
                                                                                                                                                                                      361
                                                                                                                                                                                                                                    306
                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                              186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
BG774775/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
```

830

45

104

```
Direct Submission
Submitted (20-JUU-2004) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
- Web : www.genoscope.cns.fr)
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoA V sites of the pCWNSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invirogen.
                                                                                                                                                                                                                                                                                                                                             HTC 21-JUL-2004
Cot 25-normalized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537 riracarrideraagigieergarergereargaareerreargaareerrearggggaagergregg 478
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                           163 GGCAGGCGCTCCCCCAGCCTGTCTCCTCCTCTTCTGCCCCCCGACTCCCCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGATICCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                         CCCGGGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCC
                                                                                                                                                             GGAACTAAAAAGGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      597 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact : Feng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="CSODK004YH20"
/tissue_type="HeLa cells Cot 25-normalized"
/plasmid="pCMVSPORT_6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 660
                                                                                                                                                                                                       CGCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAAC 874
                                                                                                                                                                                                                                                                                                                                                CR610742 660 bp mRNA linear full-length cDNA clone CS0DK004YH20 of HeLa cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                             Mammalia; Eutheria; Primates; Catarrhini; Hon
1 (bases I to 660)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Pull-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 3; Leus.
. 9e-150;
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54.8%; Score 657; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                              of Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                              CR610742.1 GI:50491549
HTC; CNSLT cDNA.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 660)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 54.8
Best Local Similarity 100.
Matches 657; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Faraday Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 (bases
Genoscope.
                                                                                                                         771
                                                                                                                                                                                                       831
                                                                                                                                                                                                                                              44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                          711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                           RESULT 8
CR610742/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                        à
                                                                            셤
                                                                                                                                                         q
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                              /tissue_trape="melanotic melanoma"
/lab host="DH10B (phage-resistant)"
/clone=lib=NIH MGC20:
/clone=lib=NIH MGC20:
/clone=forgan: skin; Vector: pOTB7; Site 1: Xho1; Site 2:
CooR1; cDNA made by oligo-dT priming. Directionally
cloned into EcoR1/Xho1 sites using the following 5;
adaptor: GGCACGGG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGATAATTAATTTTACATTGCTAAGTGTCCTGATCTGCTCATG-AATCCTTCTATGGGGA 698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATC 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTC 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             284
                                                                                             CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Plate: LLCM753 row: b column: 13
High quality sequence stop: 745.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGCTCATTTCTGCCTACTTCTGTCCTTCTGCTTCATGTGTACTAC-AAATAGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATGCAATGGTGA-GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrrarccccaccaarrrergaaargraaacarcarggrrrccargccgrgrrccarrre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATGGCATTTTGGTGGTCCGTTGAAGCCTT-GCCGAGGCGCGCGGCGGACGCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTTTATTTTACATTTGCTAAGTGTCCCTGATCTGCTCATGAAATCCTTCTATGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A - - CTGTGGGCCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTACACTGGTCCAGGTCCTTCATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           c-aaaarccagggaacrccrrrrccargagracrcrcaggrccrcrrrgrraagragcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITATCCCCAGCGAAITIGIGAAAIGIAAACAICAIGGITICCAIGGCGIGIICCAITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATGGCATTTTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGACGCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGGGCGAGCTGGACGCGGGCGGAGAGGCGCGGCGGCGGGCTGTGCCCTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 658.8; DB 2;
Pred. No. 3.4e-150;
0; Mismatches 12;
                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
                   Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3925932"
                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                     . .912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 744; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      651
                                                                                                                                                                                                                                                                     source
TITLE
JOURNAL
                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

240

120 538 180

9

Gaps

ö

598 120 538 180 478 240 418

9

300 358 360 298 420 238

178 540 118

28

480

Thu

요 ò g ò g ò

ઠે

g

qq

ò g δ a

ઠે

```
Eukaryota; Metazoa, Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
El (bases I to 705)
SI (bases I to 705)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Longublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Dr. Jamie Thompson, University of WI cDNA Library Preparation: Gina Zastrow-Hayes
CDNA Library Preparation: Gina Zastrow-Hayes
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD177393 705 bp mRNA linear EST 19-MAY-2003
AGENCOURT_13977124 NIH_MGC_173 Homo sapiens CDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGCGAGGCGAGCGCGGCGGCTGTGCGTTCCTTAGTACGTGC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTTCCATTTGAGATGGCATT
                                                                                                                                                                    GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                      357 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGTGTGGTCGGTTGAAGCCTTGGCCGAGGCGCGGCGGACGTGGGCGAG
                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGCCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                              61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                      597 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                            TITACATITIGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGGGGGGGGGGGGCGCGCGCCTGTGCCTTAGTACGTGC 1
                                                                                      .;
0
                                                                                      Indels
                                               Length
                                           Score 657; DB 5; L
Pred. No. 9e-150;
); Mismatches 0;
                              54.8%; scc...
100.0%; Pred. No. ...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CD177393.1 GI:30863968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                    Matches 657; Conservative
                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CD177393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           117
                                           Query Match
Best Local 9
                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                     537
                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                     477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CD177393/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
    ORIGIN
                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                               쉽
                                                                                                                             8
                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dasea 1 to 660)

2 Li, W.B., Gruber.C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

1 Unpublished (2001)

On May 5, 2003 this sequence version replaced gi:30380679.

Contact: Genoscope

Genoscope - Centre National de Sequencage

2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE

Email: seqref@genoscope.cns.fr. Web: www.genoscope.cns.fr

1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Ecor V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX362846 G60 bp mRNA linear EST 23-APR-2004 BX362846 Homo sapiens HELA CELLS COT 25-NORMALIZED Homo sapiens CDNA clone CSODK004YH20 5-PRIME, mRNA sequence.
                                                                                    358
                                                                                                                           360
                                                                                                                                                                    298
                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                540
238
                                                                                                                                                                                                                                                                                                                                 237 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 178
                                                                                                                                                                                                                                                                                                                                                                                                  TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACCGTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cell type="HELA CELLS COT 25-NORMALIZED"
/cell line="HELA"
/clone lib="Homo sapiens HELA CELLS COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   657
                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODK004DD10QP1&c=980.r. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSODK004YH20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BX362846.2 GI:46552294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                 177
                                                                                417
                                                                                                                                                                357
                                                                                                                                                                                                                                              297
477
                                           241
                                                                                                                         301
                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
BX362846/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITGCTGAGTGTCCTGATCTGCCCATGAAATCCTTCTATGGGGGAAGCTGTGGG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGACGGTCTTTTTGATTTTCCAAAAATCCA 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    099
                                                                                                                                                     from WA01 stem
                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGTGGAGCGAACTGCTCATT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rcrgcctactrctrtcccrrcrgctrcargracracaaaaragrcargcargcaarg 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone_lib="NIH_MGC_173"
/note="Vector: pDONR201; Site_1: attP2; Site_2: attP1;
LIBR_PRIMING - oligo df; METHÖD - full-length enriched;
LIBR_PROVIDER - Bradfield"
                                                                                                                                                                                                                                                                                                                                                                      GGAACCAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTCCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                        Length 705;
                                                                                                                                                     /tissue_type="embryonic trophoblasts, made
                                                                                                                                                                                                                                                                                                                      Indels
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                      Score 652.8; DB 6;
Pred. No. 9.7e-149;
0; Mismatches 7;
       http://image.llnl.gov
Plate: NDKN18 row: c column: 22
High quality sequence start: 17
High quality sequence stop: 670.
Location/Qualifiers
                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                 /lab host="DH10B TonA'
                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 98.9%;
Matches 657; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGT 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                 684
                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                           source
                                                                          FEATURES
                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 & B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ે
```

```
/organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_txef="txpe="mRNA"
/db_txef="txpe="hepatocellular carcinoma, cell line"
/clone="type="hepatocellular carcinoma, cell line"
/lab host="bullula (phage-resistant)"
/clone lib="NNH MGC 100"
/clone lib="txpe"
/clone lib=
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E. (Abases 1 to 670)

I. (Abases 1 to 670)

Mational Institutes of Health, Mammalian Gene Collection (MGC)

I. Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: CGAP (Stanford)

CDNA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLCWAS12 row: h column: 18

High quality sequence stop: 640.

Location/Qualifiers

I. . . 670
670 bp mRNA linear EST 15-JUL-2002
AGENCOURT 8286408 NIH_MGC_100 Homo sapiens cDNA clone IMAGE:6299585
Bog46470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTACATTTGCTAAGTGTCTGTTCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GEGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAGAACTITATITATIGAGGGCAAGGGGAIGCAAACAATACAAAAATCAA 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rendeceraerrecerrecerrengeral assativation and assative a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            54.4%; Score 652; DB 5; Le
100.0%; Pred. No. 1.5e-148;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                             BQ646470.1 GI:21770642
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  II RT (L1
Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   652;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                        LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                         30646470/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

68

308

g

ઠે

417

368

428

298

357

488

238 548 178 608 899

58

us-10-735-577-16.rst

g ઠે g ઠે g ò

```
663 bp mRNA linear EST 20-FEB-2002
S. mRNA sequence.
EM541317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 66).
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGGGAGGCGGCGCGCGGAGCGGAGCCTGGCCGGCGCGCTCGGCAGGGCGCTCCC 725
                                                     CGCAATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                   GEGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         594 recraagrerecrearcrecreargaarecricrargagaa--ergregegaarre
                                                                                                                                                                                                                                    CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                              CTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGGGGAGGGGGGGGGGGGGTGTGCTTCCTTAGTAGTACGTGCGGCGGGGG
9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTAT
                                                                                                                  TGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                GIGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCGAGCTGGACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information count found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM541317.1 GI:18769859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                 129
                                                                                                                                                                         189
                                                                                                                                                                                                       536
                                                                                                                                                                                                                                    249
                                                                                                                                                                                                                                                              476
                                                                                                                                                                                                                                                                                           309
                                                                                                                                                                                                                                                                                                                         416
                                                                                                                                                                                                                                                                                                                                                       369
                                                                                                                                                                                                                                                                                                                                                                                  356
                                                                                                                                                                                                                                                                                                                                                                                                               429
                                                                                                                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
BMS41317/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                             g
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                   Dp
                                                                            d
                                                                                                         ò
                                                                                                                                         g
                                                                                                                                                                ò
                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               737 bp mRNA linear EST 27-FEB-2001
602437371F1 NIH_MGC_46 Homo Bapiens CDNA clone IMAGE:4555216 5',
BG339527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3,
                                                                      480
                          TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 233
                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT 540
                                                                                                                                                            113
                                                                                                                                                                                      TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGAACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                    53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 737)
NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dupublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbe.romail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Clone distribution: NGC clone distribution information can be http://image.llnl.gov
Plate: LLCM1255 row: n column: 17
High quality sequence stop: 724.
                                                                                                                                              GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                        TTGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCGCTGGGCGAG
                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                             CTGGACGCGGGGCGGAGCGAGCGGCGCGCCTGTGCGCTTCCTTAGTA 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 651.6; DB 4;
Pred. No. 1.9e-148;
0; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                              BG339527.1 GI:13145965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        54.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 96.9
Matches 695; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   II RT (L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .737
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                       292
                                                                    421
                                                                                                232
                                                                                                                                                         172
                                                                                                                                                                                       541
                                                                                                                                                                                                                   112
                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                           25
            361
                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                      BG339527/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
```

```
/tissue_type="mixed (pool of 40 RNAs)"
/lab host="nH10B (T1-phage-resistant)"
/clone_lib="NH1MGC_118; Site_1: Sfil (ggccattatggcc);
/note="vector: pNRF.L18; Site_1: Sfil (ggccattatggcc);
Site_2: Sfil (ggccgctctggcc); Double-stranded cDNA was prepared from a pool of 40 cell line polyA+ RNAs (bladder-2%, blood - 33.4%, brain - 5.6%, breast - 12.5%, colon - 4%, connective tissue - 1.4%, eye - 1%, intestine - 2.6%, kidney - 2.2%, liver - 5.7%, lung - 10.8%, NK-cell - 5.2%, ovary - 4%, pharynx - 2.5%, prostate - 4.3%, salivary gland - 1.3%, and skin - 2.3%); 5, and 3% adaptors were used in cloning as follows:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.-AAGCAGTGGTATCAACGCAGAGTGGCCATTACGGCCGGG-3' and short AAGCAGAGGCGGAGATG-AAGCATG-ATCAACGCAGAGATG-ATCAACG-3' Rull-length erriched library was constructed using the Cloutech creator SWART kit and size-selected to contain the >0.5 kb size fraction (other fractions present in NIH MGC 141). Library created in the laboratory of M. Brownstein (NIMH, NIH). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCAATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 476
                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 843)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapber: Mail.nih.gov
Tissue Procurement: NCI
CDNA Library Preparation: Michael Brownstein Laboratory
CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.W.A.G.B. Consortium/LLNL at:
http://image.llnl.gov.p column: 19
High quality sequence stop: 457.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITACATITIGCIAAGIGICCIGAICIGCTCAIGAAAICCITCTAIGGGGGAAGCIGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTATGAGGGGCAAGGGGATGCAAAACAATCCAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 843;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 53.9%; Score 646.6; DB 5; Best Local Similarity 99.4%; Pred. No. 3.3e-147; Matches 649; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:6450402"
                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                             Homo sapiens (human)
                                                                                                                                                                     Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                ORGANISM
                                                                                                                           AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                           REFERENCE
        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             р
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BUS94774 843010 NIH_MGC_142 Homo sapiens cDNA clone IMAGE:6450402 5', mRNA Sequence.
BUS94774.1 GI:23246533
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rccaggrccrrcarrarrrrgrccacaggccagaggrcrrrrrgarrrccaaaaarcca 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rcreccracrrcrrrcccrrcrecrrcargracracracaaaaragrcarrecaare 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  348 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                 /clone="INAGE:5521398"
/tissue_type="leionyosarcoma"
/lab host="MH10B (blage-resistant)"
/clone_lib="NIH MGC_71"
/note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2: Nb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGCGACCTGGGCGAGCTGGGCGAG 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 663;
                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                    54.0%; Score 648; DB 4; Le
100.0%; Pred. No. 1.4e-147;
cive 0; Mismatches 0;
http://image.llnl.gov
Plate: LLAM12186 row: p column: 07
High quality sequence stop: 657.
Location/Qualifiers

    .663
    /organism="Homo sapiens"

                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                            648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             108 '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  168
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
BU594774/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

596

9

9

8 &

8

g ò 셤 à ઠે

셤

```
BQ678300 940 bp mRNA linear EST 15-JUL-2002
AGENCOURT B500535 NIH_MGC_112 Homo sapiens cDNA clone IMAGE:6294152
S', mRNA Sequence.
BQ678300. GI:21790979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  288 TCCAAGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. I (bases I to 90. Nath-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
CDNA Library Preparation: Rubin Laboratory
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2498 row: f column: 09
High quality sequence stop: 579.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                        AGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTTGTAATGAGAGTTAGATTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                               528 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGGGGGGGGGGGCGCGGCGGCTGTGCGTTCCTT 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGGGGGGGGGGGGGGGCGGGCTGTGCCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                      648
                                                                                                          61
                                                                                                                                                             588
                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                       468
                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BQ678300/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                        g
                                                                                                          ò
                                                                                                                                             g
                                                                                                                                                                                              à
                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db ref="taxon:9606"
/clone="IMAGE:6110024"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanotic melano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BU183451 669 bp mRNA linear EST 04-SEP-2002
AGENCOURT_7954125 NIH_MGC_112 Homo sapiens cDNA clone IMAGE:6110024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                  540
                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                   116
                                                                                                                                                                                                                                                                                                                                                                    TIGGIGICCGIIGAAGCCIIIGGCCGAGGCGCGCGGCGAACGCIGGCCGAGCIGGGCGAG 600
GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 296
                                                                                                                                                                                                                                                                                                                                                                                                                          26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 669)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                            TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                          175 GCGAATTTGTGAAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                     115 rregreregrecerreaageerregeegageergeegagergeegagergegegage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: WGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2156 row: n column: 09
High quality sequence stop: 632.
High quality sequence stop: 632.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGGAGAGGCGAGGCGCGCGCGCTGTGCGTTCCTTAGTAC 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 669;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 646.4; DB 5;
Pred. No. 3.6e-147;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU183451.1 GI:22697435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5', mRNA sequence.
BU183451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 699° .i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simil
Matches 647; C
                                                                                                    295
  355
                                                      361
                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55
                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BU183451/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                               g
```

540

109 900

49

480 169

409 300 349 289 420

Craniata, Vertebrata, Euteleostomi, Catarrhini, Hominidae, Homo.

þe

```
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                           cDNA Library Preparation: Ling Hong/Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov
                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP/Gazdar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plate: LLCM1238 row: m column: 09
High quality sequence stop: 660.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                    Homo sapiens
Bukaryota, Metazoa, Chordata,
Bummaila; Butheria; Primates;
1 (bases 1 to 681)
BG332809.1 GI:13139247
EST.
                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                     /mol_type="mrx"_creen.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete.complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITACATITIGCTAAGIGICCTGATCTGCTCATGAAAICCTICTATGGGGGAAGCIGIGGG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCA 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACAITIGCTAAGIGICCIGAICTGCTCAIGAAAICCTICIAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcreccracrrcrrrcccrrcrargracracracaaaragrcarrecaare 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAAGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCGTTGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTIAICTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTGTGGTCCGTTGAAGCCTTGGCCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGACGCGGGGCGGAGGCGAGCGCGGCGGCTGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 646.4; DB 5;
Pred. No. 3.7e-147;
0; Mismatches 1;
                                   organism="Homo sapiens'
                                                                                                                                                                                                                                                                                                                                                                                                                                                      53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
nes 647; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                             DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         දි දි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298
                                                                                                                                                                                                                                                                                                                                                                          598
                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                         538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGCCTACTTCCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                        656 GGAACTAAAAAAAAAC-TTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                477 GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                           Length 681;
                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                        Score 645; DB 4; L
Pred. No. 7.8e-147;
0; Mismatches 0;
                                                                                                                                                                                                                                                                          53.8%;
ilarity 99.8%;
Conservative (
                                                                                                                                                                                                                                                                                        Local Similarity
nes 656; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

BG332809 681 bp mRNA linear EST 27-FEB-2001 602430639F1 NIH_MGC_18 Homo sapiens CDNA clone IMAGE:4548656 5', mRNA sequence.

BG332809/c LOCUS DEFINITION

ACCESSION

```
BU602356.1 GI:23254115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                         959
                                                                                             61
                                                                                                                                                                  121
                                                                                                                                                                                                        536
                                                                                                                                                                                                                                                                              476
                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                     416
                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                            356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BU602356/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                 g
                                                                                ∂
                                                                                                                      임
                                                                                                                                                                ò
                                                                                                                                                                                                    음
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol type="mrno" saplems"
/mol type="mrno" saplems"
/db_xref="taxon:9606"
/clone="mancad (pool of 40 RNAs)"
/lab_host="mancad (pool of 40 RNAs)"
/lab_host="mancad (pool of 40 RNAs)"
/clone="lab"
/lab_host="mancad (pool of 40 RNAs)"
/clone="weather the saplems"
/note="weather the saplems"
/note="weather the saplems"
-2%, blood - 33.4%, brain - 5.6%, breast - 12.5%, colon - 4%, connective tissue - 1.4%, eye - 1%, intestine - 2.6%, kidney - 2.2%, liver - 5.7%, lung - 10.8%, NK-cell - 5.2%, ovary - 4%, pharynx - 2.5%, prostate - 4.3%, salivary gland - 1.3%, and skin - 2.3%). 5' and 3' adaptors were used in cloning as follows:
5'-AATCTAGAGGGGGGGGGGGATG-dT(30) NN-3. Full-length enriched library was constructed using the Clontech Creator SMART kit and size-selected to contain the >0.5 kb size fraction (other fractions present in NIH_MGC_141).
Library created in the laboratory of M. Brownstein (NIMH, NIH) NIH).
                                                                                                                                                                                                                                                                                                                                BUS02376 692 bp mRNA linear EST 12-SEP-2002
AGENCOURT_8905908 NIH_MGC_142 Homo sapiens cDNA clone IMAGE:6452219
GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                              177 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCGTT 118
                                                                                                                             541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 692)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                  CTGGACGCGGGCGGAGAGCGAGCGGGCGGGCTGTGCGCTTCCTTAGTACGTGC 657
                                                                                                                                                                  117 TTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Apencourt Bioscience Corporation Clone distribution: MGC clone distribution information can lfound through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov.row: l column: 12 Plate: L.CM2625 row: l column: 12 High quality sequence stop: 541.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 53.7%; Score 644; DB 5; Length 692; Best Local Similarity 99.1%; Pred. No. 1.4e-146; Matches 647; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .692
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       BU502376.1 GI:22806955
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                  , mRNA sequence.
                                                                                                                                                                                                                                        57
                                                                                                                                                                                                        601
                                                         481
                                                                                                                                                                                                                                                                                                                 BU502376/c
                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                            g
                                                     ò
                                                                                  요
                                                                                                                            ò
                                                                                                                                                                                                    δ
```

ö

Gaps

ö

```
540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 20-SEP-2002
                                                                                                             120
                                                                                                                                                               537
                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGTCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                     597
                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       237
                                                                                                                                                                                                                                                                               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                    236 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTTTAAGTAGCCTTTATCCCCA 177
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I Chaese 1 to 807)
NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                             GTAACTAAAAAAGAACTTTATTTATTGAGGCAAAGGGGATGCAAACAATCCAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    176 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA Library Preparation: Michael Brownstein Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://mage.llnl.gov.n column: 11 High quality sequence stop: 569.
                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                  596 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTGNTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                          181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BU602356
AGENCOURT 10014821 NIH_MGC_142 Homo sapiens cDNA clone IMAGE:6496426 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
```

```
/organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9666"
/db_xref="taxon:96562"
/clone="IMAGE:580562"
/tissue_type="epidermoid carcinoma, cell line"
/lab host="hll0B (phage-resistant)"
/clone lib=NIH MGC 101"
/note="Organ: lung; Vector: pOTB7; Site_1: EcoR1; Site_2:
Xho1; cDNA made by oligo-dT priming. Directionally cloned into EcoR1/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."
                                                                                       655 bp mRNA linear EST 02-APR-2002
AGENCOURT 7051984 NIH_MGC_101 Homo sapiens cDNA clone IMAGE:5805962
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 655)
                                                                                                                                                                                                                                                                                                                                                                                                       Contract: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATC
CDNA Library Preparation: Rubin Laboratory
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2046 row: a column: 03
High quality sequence stop: 624.
  578 AAGCITAICTGGTAITIAACTITICTTTCTCTGCTIGITTTTAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              638 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 655)
NIH-MCC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 53.2%; Score 638; DB 5; Length 655; Best Local Similarity 100.0%; Pred. No. 4e-145; Matches 638; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                              BQ073203.1 GI:19902249
                                                                                                                                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1, .655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                     BQ073203/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                       ACCESSION
                                                                RESULT 20
                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRIGIN
  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                /clone="MAGE:6496426"
/tissue_type="mixed (pool of 40 RNAs)"
/tissue_type="mixed (pool of 40 RNAs)"
/tissue_type="mixed (pool of 40 RNAs)"
/clone_lib="NIH MGC_142"
/clone_lib="NIH MGC_142"
/clone_lib="NIH MGC_142"
/note="Vector: DDNR-LIB; Site 1: Sfi (ggccattatggcc);
Site_2: Sfi (ggccgcctcggcc); Double-stranded cDNA was prepared from a pool of 40 cell line polyA+ RNAs (bladder-2%, blood - 33.4%, brain - 5.6%, breast - 12.5%, colon - 4%, connective tissue - 1.4%, eye - 1%, intestine - 2.6%, kidney - 2.2% liver - 5.7%, lung - 10.8%; NK-cell - 5.2%, ovary - 4%, pharynx - 2.5%, proseate - 4.3%, salivary gland - 1.3%, and skin - 2.3%). 5' and 3' adaptors were used in cloning as follows:
                                                                                                                                                                                                                                                                                                                                                                                                            5'-ATTCTAGAGGCCGAGGCGGACATG-dT(30)NN-3'. Full-length enriched library was constructed using the Clontech Creator SMART kit and size-selected to contain the >0.5 kb size fraction (other fractions present in NIH_MGC_141). Library created in the laboratory of M. Brownstein (NIMH, NIH). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGACCCTTTGGGA 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAACTCTTATCAGGGAGGAGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGICCTICTITATAAGIAGCCITITAICCCCAGCGAAITIGIAGAAAIGIAACAICAIG 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242 AGGTCCTCCTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCCAATTAGGGAAAAGAAG 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACA 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCACA 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAGAGGGGTCTTTTTGATTTTCCAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTC 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTCCATGCCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGTCCGTTGAAGCCTTGGCC 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCAGGGGGATGCAAACAATACAAAATTCAAAGGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGACCCTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTTGGTCCGTTGAAGCCTTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGCAAGGGGATGCAAACAATACAAAAA-TCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 5; Length 807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53.4%; Score 640.6; DB 5, 99.2%; Pred. No. 9.6e-146; ive 0; Mismatches 4;
                                          'organism="Homo sapiens"
                                                                                     /db xref="taxon:9606"
Location/Qualifiers
                                                            type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              654;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           528
                        source
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              상
임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

þę

ö

Gaps

579

180 519

240

399

```
99.58;
 Best Local Similarity 99.5
Matches 638; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BI825167
                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                  476
                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                        356
                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 22
BI825167/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                ò
                                                                 q
                                                                                                         ð
                                                                                                                                 ď
                                                                                                                                                                                              d
                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .1125.
| / organism="Homo sapiens" |
| mol_type="Homo sapiens" |
| mol_type="mRNM" |
| / db_xref="taxon:9606" |
| / db_xref="taxon:9606" |
| / db_nost="taxon:9606" |
| / db_nost="bRNB" |
| / db_nost="bRNB" |
| / db_nost="bRNB" |
| / dome="bRnB |
| / destroyed; RNA source leukocytes from anonymous pool of non-activated adult donors. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.7 kb, insert size range 1.2-3.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 027. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                       AGENCOURT 6544034 NIH_MGC_118 Homo sapiens cDNA clone IMAGE:5745830
                                                         480
                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 159
                                                                                                                                                                                      540
                                                                                                                                                                                                                                                TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGGGGGGACGCTGGGCGGAGCTGGGCGAAG 600
                                                                                                                                                                                                     GCGAATTIGIGAAAIGTAAACAICAIGGITICCAIGGCGIGTICCATTIGAGAIGGCATI 99
                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1125)
MIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                GTGAGGCCCGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM12769 row: g column: 15
High quality sequence stop: 613.
                                                                                                                                                                                                                                                                                                             CTGGACGCGGGCGAGAGGCGAGCGCGGCGGCTGTG 638
                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGCGCGGCCGGCGGCTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BM549820.1 GI:18785543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
301
                              338
                                                                                         278
                                                                                                                                                      218
                                                                                                                                                                                   481
                                                                                                                                                                                                                 158
                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                              86
                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                        38
                                                            361
                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 21
BM549820/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                              g
                                                                                                                                             a
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                      엄
                                                 8
                                                                                                                    ò
                                                                                                                                                                           ò
                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                        ઠે
```

DB 4; Length 1125;

53.1%; Score 636.2;

Query Match

```
Homo sapiens (human)
Homo sapiens (human)
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

I Chases I to 657)
NH-MGC http://mgc.nci.nh.gov/.

NAtional Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
U Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.inh.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI825167 60072039F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5164209 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                 597
                                                                                                                                                                                       120
                                                                                                                                                                                                                                             537
                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         117
                                                                                                                                                                                                                                                                                                                                      536 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 ITGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rregrerestecerreadecriredeceadeceadeceadecredeceaderedeceade 57
                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296 TCCAGGICCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                               GGAACTAAAAAAAAAACATTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                       61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                       121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                               596 AAGCTTATCTGGTATTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                         ;
0
                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGACGCGGGGGGGGAGCGAGCGCGGCGGCGGCTGTGCGC 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 credacecedecedadecedecedecedecedecrearece 16
Pred. No. 1.2e-144;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BI825167.1 GI:15936717
```

```
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 645; Conserv
                                         BE378444
                                                                  EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                     Bource
                                                                                             ORGANISM
             DEFINITION
                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                        ACCESSION
                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                   /tissue_type="medula".
/lab host="DHIOB"
/clone_lib="NNH MGC_119"
/note="Organ: DFain; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: ECORV (destroyed); RNA source normal medulla from annonymous male age 27. Library is oligo-dT primed and annonymous male age 27. Library is oligo-dT primed and alrectionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note:
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGGCGGTCTTTTTGATTTTCCAAAAATCCA 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITACATITIGCIAAGIGICCTGAICTGCTCAIGAAATCCTICTAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGGIGIGGICCGITGAAGCCITGGCCGAGGCGCGGCGGACGCIGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACCAAAATCAA 577
                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAGAACTTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATITGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                               DB 4; Length 657;
                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGCGGAGAGGCGAGCGCGGCCTG 636
                                                                                                                                                                                                                                                                                            52.9%; Score 634.4; DB 4; 99.8%; Pred. No. 3.1e-144; ive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Invitrogen). Research Gethis is a NIH_MGC Library.
                                                      organism="Homo sapiens"
            quality sequence stop: 651 Location/Qualifiers
                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5164209"
  row: m
Plate: LLAM11407
High quality seque
                                                                                                                                                                                                                                                                                                                       Matches 635; Conservative
                                    .657
                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  276
                                                                                                                                                                                                                                                                                                                                                                                                                               576
                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36
                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                             Best Local
                                         Bource
                          FEATURES
                                                                                                                                                                                                                                                                     DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ک</u> ۾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                    ð
```

RESULT 23 BE378444/c

```
/un_Ara_rash()2020.
/tissue_type="endometrium, adenocarcinoma cell line"
/lab_nost="DH10B (phage-resistant)"
/lab_nost="DH10B (phage-resistant)"
/clone_lib="NH1 MGC 44"
/note="Organ: uterus; Vector: pOTB7; Site 1: XhoI; Site_2:
EcoR1; CDNA made by Oligo-dT priming. Directionally
cloned into EcoRI/XhoI sites using the following 5'
adaptor: GGCACGAG(G). Library constructed by Ling Hong
in the laboratory of Gerald M. Rubin (University of
california, Berkeley) using 2AP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
     EST 21-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ξ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     466 cArgagracrcrcadgrccrccrrrgrraagragccrrrarccccagcgaarrrgrgaaa 407
                                                                                                                                                                                                                Vertebrata; Euteleostomi;
BE378444 11NH_MGC_44 Homo sapiens cDNA clone IMAGE:3608925 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            315 TAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        526 TATITIGICCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      406 TGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        375 TATTTTGTCCACAGCCAGGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCCAGCGAATTTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            þ
                                                                                                                                                                                                                                                                1 (bases 1 to 645)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Close distribution: MGC close distribution information can lfound through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gow: i column: 22 Plate: LLCMS2 row: i column: 22 High quality sequence stop: 639.
                                                                                                                                                                                     Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52.9%; Score 634; DB 2; Length 645; 99.8%; Pred. No. 3.8e-144; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .645
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                            BE378444.1 GI:9323909
                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

333 360 273

540

93

900

```
Mammalia; Eutheria; Primates; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E. 1 (Dases I to 856)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Longublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: ATCC

CONA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Plate: LLCM1220 row: k column: 24

High quality sequence start: 4

High quality sequence start: 4

High quality sequence start: 6

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BG335520 856 bp mRNA linear EST 27-FEB-2001
                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT 393
                                                                                                                                                                                                                                                                                                                                272 TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGTCTTTTTGATTTTCCAAAAATCCA 213
                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                 212 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92 riderierderccerreaadcerreecceaecececeaeccereeccaecceaecreecceae 33
  GTGAGGCCCCCCAATTAGGGAAAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 152 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .856
/organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:4541711"
/tissue type="choriocarcinoma"
/lab host="DH10B (phage-resistant)"
/clone_lib="NH10B (phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGGGGGAAGGCGAGCGCGGCGG 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          credacecedededadadecedededed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BG335520.1 GI:13141958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
BG335520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                   361
                          512
                                                               181
                                                                                                 452
                                                                                                                                                                             392
                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                            332
                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 25
BG335520/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                               셤
                                                                                                                                      à
                                                                                                                                                                         g
                                                                                                                                                                                                                                                    QQ
                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                      셤
                                                             8
                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                   BQ050753 655 bp mRNA linear EST 29-MAR-2002
AGENCOURT_6808933 NIH_MGC_71 Homo sapiens CDNA clone IMAGE:5784763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                               167
                                                                                                                      794
                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Link at:
http://image.llnl.gov
Plate: LiAM12870 row: m column: 20
High quality sequence stop: 654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
572 AAGCTIAICIGGIAITITAACTITICCTITCTCIGCTIGICAAAGGAGGTIAGATTITAIT 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol type="makna" captum. /mol type="makna" captum. /mol type="makna" stref="taxon:9606" /clone="lange:5784763" /lab_host="lalomyosarcoma" /lab_host="DH10B (phage-resistant)" /clone lib="NIH MGC 71" /note="Cogan: uterus; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sali; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.1 kb. "
                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 655)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 60
                                                           AGGCGCGCGCGCGCGCGAGCCTGGCGGGCGCTCGGCAGGGCGCTCCCCCAGCCCTG
                                                                                                                  MIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                           AACTICICITCAGIAGAAACGGICCIGCICCICGAAIATTICAGGGC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52.7%; Score 632; DB 5; Length 655; 100.0%; Pred. No. 1.2e-143; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BQ050753.1 GI:19810093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                          , mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 632; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . . .655
                                                                                                                                                                                                                                                                                                                                                                                                               BQ050753
                                                                             226
                                        675
                                                                                                                  735
                                                                                                                                                        166
                                                                                                                                                                                               795
                                                                                                                                                                                                                                    106
                                                                                                                                                                                                                                                                           855
                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                           RESULT 24
BQ050753/c
                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                       g
                                                                                                              8
                                                                                                                                                    셤
                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dp
                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

```
TITIACAITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAG_LIB=UI-H-FG1
TAG_SEQ=CGGTCACTC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo
                                                                                                                                                                                 CA431436 CA431436.1 GI:24794162
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.6%;
99.5%;
                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
1 (bases 1 to 666)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               643; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .666
                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                 RESULT 26
CA431436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
COMMENT
                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ∂
                      Site 2: ECORI, CDNA made by oligo-dT priming.

Directionally cloned into EcoRI/KhoI sites using the following 5' adaptor: GGCACGG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGCTTCAATTTCTGCCTACTTTCTTTCCCTTCTGCTGTCATGTGTACTACCAAAATAG 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 GCTGGGCGAGCTGGGCGAGCTGGACGCGGGCGAGGGAGGCGAGCGCGGCGGCGGCTGTGCGC 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         137
                                                                                                                                                                                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTAAACTTTTCTTTCTC--GCTCTCAAATGAGAGTTAGATTTATTT 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTACATTTGCTAAGTGTCCTGATCTGCTCAT----GAAATCCTTCTATGGGGGAAGC-T 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGGGCAGATTCC--TTAAGCGACCCTTTGGGACAACTC--TTATCAGGAGGAGGAGCAA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Graduscadarrecerrita accaece certrica de la constructiva de la constantiva del constantiva de la constantiva de la constantiva della const
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     556 ririccarcretacacretrescentericarrariritatescacaccacaccerr 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           496 TTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGT 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCCATTTGAGATGGCATTTTGGTGTGCTCGTTGAAGCCTTGGCCGAGGCGCGGGGGG 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rrccarrrangarascarrrrasrangarccarrangeccrrascasscassas 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGGCGAGCTGGGCGAGCTGGACGCGGGGCGGAGAGGCGAGCGCGGCGGGCTGTGCGC 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGGGCGCTCGGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCCTGTTCCTGCCCCCGAC 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCCCGACCCCGGGCGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGA 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCTCGCCCCCCAGACAGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTG 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTAACATGTGCTAAGTGTTCCTGATTCGGCCTCATGAAAATCTTTCTATGGGGAAACCTT 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            283 TAGTCATTGCATGCAATGGTGAGGCCCGCA-ATTAGGGAAAAGAAGCTCTGGAAGCCCAC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCCCGACCCCGGGGCGCGCGCCCACGCCCTGCCCTCGCTCCCCGGACCCGGCCTCGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCCTCGCCCCCCAGACGGTCTTGTAACTTCTCTTCAGTAGAAACGGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGGGCGCTCGGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTCTTCTTCTGCCCCCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C---TGCTCATTTCTGCCTAC-TTCTTTCCCTTCTGCT-TCATGTGTACTACAAAA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrcarrigcargcaaardgrgaggcccgcacarragggaaaagaagcrcrggaagcccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGT
                                                                                                                                                                                                                                                                                                                    Gaps
/note="Organ: placenta; Vector: pOTB7; Site 1: XhoI;
                                                                                                                                                                                                                                                                                                                    21;
                                                                                                                                                                                                                                                               Length 856;
                                                                                                                                                                                                                                                               Score 631.4; DB 4; Length Fred. No. 1.7e-143; 0; Mismatches 52; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCTCGAATATTTCAG 897
                                                                                                                                                                                                                                                               52.7%;
ilarity 91.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CICICGAAIAITICAG 1
                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                    783;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           882
                                                                                                                                                                                                                                                                                                                                                                                                                             854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                462
                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
is (bases 1 to 666)

NoT-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NoT-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
Notional Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: James Martin
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@uiowa.edu
Seq primer: Ml3 PORWARD
POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78
                                                                                                                                            Craniata, Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CA431436 666 bp mRNA linear EST 07-NOV-
UI-H-FG1-bgp-m-06-0-UI.sl NCI CGAP_FG1 Homo sapiens CDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTG-AGGGCAAGGGGATGCAAACAATACAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTTTTTTGNAGGGCAAGGGGATGCAAACAATACAAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 630.8; DB 6;
Pred. No. 2.3e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens"
                                                                                                                                            Chordata;
Primates;
```

g

8

g ò d ð g 8 g ઠે 8 8 g ઠે

ठे

```
49 yo. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 2.1 kb, insert size range 1-3.5 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 036."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BF686811 938 bp mRNA linear EST 22-DEC-2000 602140775F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4301946 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGCTTATCTGGTATTTAACTTTTCTTTCTGCTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                 GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria,
1 (bases 1 tó 938)
11 (bases 1 tó 938)
Nath-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480 AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 AGCGAATTTGTGAAATGTAAACATGGTTTCCATGGCGTGTTCCATTTGAGATGGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGA
                                                                                                                                                                                                                                                       661 GGAACTAAAAAGAACTTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCA
                                                                                                                                                                                                                                                                                                                         601 AAAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTAATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTGGTGTGGTCCGTTGAAGCCTTGGCCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGA
                                                                                                                                                                                                                    GGAACTAAAAAAGGAC-TTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCA
                                                                                                                                             Length 687;
                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 629; DB 4; L
Pred. No. 6.5e-143;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BF686811
BF686811.1 GI:11972219
                                                                                                                                             52.5%;
ilarity 99.8%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
                                                                                                                                           Query Match
Best Local Similarity
Matches 640; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 28
BF686811/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                             ORIGIN
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BMS46362 G87 bp mRNA linear EST 20-FEB-2002
AGENCOURT_6498563 NIH_MGC_125 Homo sapiens CDNA clone IMAGE:5722924
                                                      GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 378
                                                                                                                                                                                                                                                                      GTCCAGGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTCCAAAAATCC 438
                                                                                                                                                                                                                                                                                                                           AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                             439 AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 498
                                                                                                                                                                                                                                                                                                                                                                                                AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                    GTCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Annual sapiens (number)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mational Institutes of Health, Mammalian Gene Collection (MGC)

Nopublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: Gapbs-r@mail.nih.gov

Tissue Procurement: Invitrogen

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bisocience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://mage.linl.gov

Plate: LiAMM2709 row: m column: 05

High quality sequence stop: 616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="NIH_MGC_125"
//note="Organ: ovary (pool of 3); Vector: pCMV-SPORT6;
Site_1: EcoRV (astroyed); Site_2: Not1; RNA source pool of three ovaries, from females ranging in age from 38 to
                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGGACGCGGGGAAAGGCGAGCGCGGCGGCGGCTGTGCGCCTCC 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gcregacecegaceceaacceaeceaeceaecrerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5722924"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /lab host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5', mRNA sequence.
BM546362
BM546362.1 GI:18779258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                   499
   139
                                                                      199
                                                                                                          240
                                                                                                                                             259
                                                                                                                                                                                 300
                                                                                                                                                                                                                319
                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             009
                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 27
BM546362/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
```

539

122 599

62

419 242 479 182

179

542

602

```
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .990
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3928606"
                                                                                                                                                                                                                       BE745512.1 GI:10159504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52.4%;
llarity 99.4%;
Conservative
                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                       mRNA sequence.
                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                       BE74551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            631;
                                                                                                                                                                                                                                         EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                    RESULT 29
BE745512/c
LOCUS
                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                   ð
                                                                                                                                                                                                                                                                                                                        /clone lib="NIH MGC 46"
/note="Organ: uterus; Vector: pOTB7; Site_1: XhoI; Site_2:
ECRI; cDNA made by Oligo-dT priming. Directionally cloned
into ECRI/XhoI sites using the following 5' adaptor:
GGCACAG(G). Size-selected >500bp for average insert size
1.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-cDNA synthesis kit (Stratagene) and Superscript
II RT (Life Technologies). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATICCTIAAGCGACCCTITGGGACAACTCTIATCAGGGAGGAGGAACTGCTCAIT 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACCTAAAAAAGAACTTTATTTATTGAGGGCAAGGGTATGCAAACAATACCAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTAC-AAAATAGTCATTGCATGCAAT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GICCAGGICCITCATIAITITGICCACAGCCAGAGGGICTTTTTGAITTTCCAAAAAICC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Greendercerrentaritricrecaedeceaedecererritreatriceananice 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u> AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGA
                                                                                                    be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrage by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon.9606"
/clone="IMAGE:4301946"
/tissue_type="leiomyosarcoma cell line"
/lab_host="DH10B_(phage-resistant)"
                                                                                                                 found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1163 row: e column: 19
High quality sequence stop: 654.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 628.6; DB 2;
Pred. No. 8.5e-143;
0; Mismatches 4;
 Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.4%;
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                           . .938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Simi
Matches 642;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                           source
                                                                                                                                                                                         FEATURES
 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
Sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ራ ዓ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
/Lissue type="adenocarcinoma cell line"
/lab host="DH10B (phage-resistant)"
/clone_lib="NH10B (phage-resistant)"
/note="Organ: o'vary; Vector: pOTB7; Site_1: XhoI; Site_2:
BCORI; CDNA made by oligo-dT priming. Directionally
cloned into BCORI/XhoI sites using the following s'
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using 2AP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryotzi, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I bases 1 to 990)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Plate: LLCW/GO row: a column: 23
High quality sequence stop: 650.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          635 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACGATACCAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATICCTIAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                      BE745512 990 bp mRNA linear EST 15-SEP 601579889F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3328606 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 990;
646
600 GCTGGACGCGGGCGGAGAGGCGAGCGCGGCGGCTGTGCGCCTTCC
                                 48 GCTGGACGCGGGGCGGAGCGCGCGCGCGCGCGCTGTGCCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 628.6; DB 2;
Pred. No. 8.6e-143;
0; Mismatches 4;
```

Thu

```
651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                       -
                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 31
CA307888
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                      셤
                                                                                      원장
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                       ŝ
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 충
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Butheria; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 674)

NIH-MGC http://mgc.nci.nih.gov/.

L Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DoTD/DTP

CDNA Library Preparation: Life Technologies, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiM. at:

http://image.lln.gov
Plate: LLAM12001 row: i column: 06

High quality sequence stop: 663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"

/mol_type="mRNA"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="TMAGE:532973"

/tissue_type="mammary adenocarcinoma, cell line"

/lab host="blid" Blidge-resistant)"

/clone lib="NIH MGC 87"

/note="Organ: breast; Vector: pCMV-SPORT6; Site_1: NotI;

/note="organ: breast; Vector: pCMV-sPoRT6; Vector: pCMV-sPoRT6; Vector: pCMV-sPoRT6; Vector: pCMV-sPoRT6; Vector: pCMV-sPoRT6; Vector: pCMV-sPoR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI858258 674 bp mRNA linear EST 10-OCT-2001
                                                                                                                                                                            420
                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 216
                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                              215 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATTCCCA 156
                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGCACGCTGGGCGAAGCTGGGCGAAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTAG
                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGGGAGAGGCGAGCGCGGGGCT 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGGGGGGGGGGGCGGCGCGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BI858258.1 GI:15999005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BI858258
                                                                                                                      335
                                                                                                                                                                       361
                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 30
BI858258/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                       g
                                                                                                                                                                  ઠે
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                     d
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                       ે
```

Score 628.4; DB 4; Length 674; Pred. No. 9.1e-143;

52.4%;

Query Match Best Local Similarity

```
Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Dr. Gary W. Hunninghake, U of I
Tissue Procurement: Dr. Gary W. Hunninghake, U of I
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 05-AUG-2004
CDNA clone
                                                                                        592
                                                                                                                                      119
                                                                                                                                                                                                                                                                          475
                                                                                                                                                                                                                                                                                                                         239
                                                                                                                                                                                                                                                                                                                                                                     415
                                                                                                                                                                                                                                                                                                                                                                                                                                                             355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                598
                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     538
                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
1 (bases 1 to 686)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                     GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACGGAAAATCA
                                                                                                                                 60 AAAGCTTATCTGGTATTTAACTTTTCTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                     GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAGCGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCCAGGTCCTTCATTATTTTGTCCACACAGGGGTCTTTTTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGGAACTCCTTTTCCATGAGGTAGCTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCA
                                                                                                                                                              474 GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGACGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                          414 TTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGAACTCCTTTTCCATGAGTA-CTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTGGTGTGGGCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGCGAGCTGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAC-AAAAATCA
                                                                                                                                                                                                                              120 TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         599 AGCTGGACGCGGGGGGGGGGGGGGGGGGGGCTGTGCTTCCTTAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CA307888 686 bp mRNA linear UI-H-FTI-bib-a-01-0-UI.S1 NCI_CGAP_FT1 Homo sapiens UI-H-FT1-bib-a-01-0-UI 3', mRNA sequence.
1; Indels
Mismatches
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CA307888.1 GI:24470942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumor Gene Index
Unpublished (1997)
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CA307888
```

```
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 811)

S NIH-MGC http://mgc.nci.nih.gov/.

National institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.inih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM1479 row: a column: 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              upon cloning). Average insert size 1.5 kb, insert size range 1-3 kb. Library is normalized and enriched for [ull-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 019. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI488419 811 bp mRNA linear EST 28-AUG-2001
603020917F1 NIH_MGC_114 Homo sapiens CDNA clone IMAGE:5191564 5',
                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not1; State_2: EcoRV (destroyed); RNA source anonymous pool of 6 male brains, age range 23-27, Yo. Library is oligo-dr primed and directionally cloned (EcoRV site is destroyed
                                                                                                                                                                                         421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                            GCGAATITGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 498
                                                                                                                                                                                                                                                                                                                                                                                                                                  | TTGGTGTGCTCCGTTGAGCCTTGCCGAGCGCGGGGGAGCGCTGGGCGAGCTGGGCGAG 600
319 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 378
                                                                                                                                                                                                                                                                                                                                                                         499 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGG-ATT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 52.4%; Score 627.8; DB 4; Best Local Similarity 98.2%; Pred. No. 1.3e-142; Matches 659; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5191564"
/lab_host="DH108"
/clone_lib="NIH_MGC_114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop: 669.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BI488419
BI488419.1 GI:15327647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                   361
                                                                                                                            379
                                                                                                                                                                                                                                                   439
                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BI488419/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                   8
                                                                                                               g
                                                                                                                                                                                         ò
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                            /lac.nost="NHIUB (Life Technologies)"
//lac.nost="NCI (GAP FT1"
//note="Organ: Lung; Vector: pT773-Pac (Pharmacia) with a modified polylinker; Site 1: ECOR 1; Site 2: Not 1;
NCI_CGAP_FT1 is a normalized conditions (library constructed from a pool of 81 RNA samples from Alveolar Macrophages
challenged with different treatments. The mRNA samples were a mixture of these conditions (times refer to incubations following isolation by bronchoalveolar lavage) (some normal donor macrophages were cultured in some of the conditions, other donor macrophages in different conditions). The mRNA samples were pooled for library construction. Control 0 hours; control 3 hours; Control 24 hours; LPS 100 ng/ml, 3 hours; LPS 100 ng/ml, 24 hours; Rtabbiella moi 10, 24 hours; Rtabbiella moi 10, 24 hours; Rtabbiella moi 10, 3 hours; Staph aureus moi 10, 3 hours; Machovirus moi 500, 24 hours; Adenovirus moi 500, 3 hours; Ad vector + LPS 24 hours; The library was normalized according to Bonaldo, Lennon and Soares, Genome Research, 6719-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded CDNA was ligated to an ECOR I adaptor, digesed with an oligo-dT primer containing a library tag sequence that is located between the Not I site and the GT/13-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library is GCCATGCCG. The tissue was provided by Dr. Gary W. Huminghake of the University of Iowa.

**PAC TISCHE-LUMAN FOR IN AND FOR IN SILVE SUPPARSED FOR TISCHE-LUMAN FOR IN SUPPARSED FOR TISCHE-LUMAN FOR TISCHE-LUMAN FOR TISCHE-LUMAN FOR TISCHE-L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139 TTTACATTTGCTAAGTGTCCTGATCTGCTGAAATCCTTCTATGGGGGAAGCTGTGGG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAAATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAAATCAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52.4%; Score 628.2; DB 6; Length 686; 99.2%; Pred. No. 1e-142; ive 0; Mismatches 3; Indels 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Human Lung Alveolar Macrophage
                                                                                                                                                                                                                                                   /dev_stage="Adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                   tissue_type="Alveolar Macrophage"
                                                                                                                                                                                      /clone="UI-H-FT1-bib-a-01-0-UI"
                                                                                            organism="Homo sapiens"
                                                                                                                         /mol_type="mRNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAG_LIB=UI-H-FT1
TAG_SEQ=GGCCATGCCG"
                                   location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 99.2
Matches 652; Conservative
   POLYA=Yes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                   source
                               FEATURES
```

셤

g ò

ò

ብ ራ 8 g

ે

ò 엄 ò 엄 ò g ò g ò g ઠે ద 8 a ઠ g ò

```
Clone Distribution: Clone distribution information can be obtained
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 627; DB 6; Length 66
Pred. No. 2e-142;
0; Mismatches 5; Indels
                  from Dr. M. Bento Soares, bento-soares@uiowa.edu
Seg primer: M13 FORWARD
POLYA=Yes.
                                                                                                                                                          /tissue_type="Chondrosarcoma Grade II"
/dev_stage="Adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                                                                                                                                                                                                                                              TAG_LIBSUE=grade-2-chondrosarcoma
TAG_LIB=UI-H-EZ0
                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="UI-H-EZ0-bak-j-10-0-UI"
                                                                                                 sapiens"
                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAG_SEQ=ATCTAATATG"
                                                                                               organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 52.3%;
Best Local Similarity 99.1%;
Matches 641; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       499
                                                                                  source
                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CA412335 665 bp mRNA linear EST 07-NOV-2002
UI-H-EZO-bak-j-10-0-UI.sl NCI CGAP Chl Homo sapiens cDNA clone
UI-H-EZO-bak-j-10-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Steven Gitelis/ Rush Presbiterian, Dept. of
                                                                120
                                                                                                                            180
                                                                                                                                                                                           240
                               612
                                                                                             552
                                                                                                                                                            492
                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 312
                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCGCGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                  252
                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTT-TTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGCGGAC-----GCTGGGCGA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGGCGAGCTGGACGCGGGGGGGGGGCGCGCGGGCTGTGCGCCTTTAG 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of Iowa
   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostom. Mammalia; Butheria, Primates; Catarrhini, Hominidae, Homo.

1 (bases 1 to 665)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NAI-OGAP TABLE INStitute, Cancer Genome Anatomy Project (CGAP)
                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACACACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTAATGAGGTTAGATTTTATT
                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                        TTGACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTCACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTGTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Trigergreerccerreaaeccrreeccaagececeaecacaccragecgagcreege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CA412335
CA412335.1 GI:24774986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACGTGCGGCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACGTGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Orthoapedics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
н
                               671
                                                                                            611
                                                                                                                                                        551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131
                                                              61
                                                                                                                         121
                                                                                                                                                                                        181
                                                                                                                                                                                                                     491
                                                                                                                                                                                                                                                                                    431
                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                  371
                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                               311
                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 33
CA412335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
```

용 . 첫 셤 .₽ g

/done lib="NCI CAPP Chi"
//clone lib="NCI CAPP Chi"
//clone lib="NCI CAPP Chi"
//note="Organ: Left Pelvis; Vector: pT7T3-Pac (Pharmacia)
with a modified polylinker; Site l: EcoR I; Site 2: Not I;
NCI CGAP Chi is a cDNA library containing the following
tissue(s): Chondrosarcoma Grade II. The library was
constructed according to Bonaldo, Lennon and Soares,
Genome Research, 6:791-806, 1996. First strand cDNA
synthesis was primed with an oligo-dT primer containing a
Not I site. Dobble stranded cDNA was ligated to an EcoR I
adaptor, digested with Not I, and cloned directionally
into pT7T3-Pac vector. The oligonucleotide used to prime
the synthesis of first-strand cDNA contains a library tag
sequence that is located between the Not I site and the
(dT)ls tail. The sequence tag for this library is 138 198 258 299 119 179 239 318 359 479 378 419 438 498 539 558 29 78 79 AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTCTGCCAAATGAGAGTTAGATTTTAT TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCAT GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG GGAACTAAAAAAGAACTTTATTTAT-TGAGGGCAAGGGGATGCAAACAATACAAAAATCA GGAACTAAAAAAGAACTTTATTTATNTGAGGGCAAGGGGATGCAAACAATACAAAAATCA AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGGTTGAAATGAGAGTTAGATTTTAT TITIACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG GGCAGATTCCTTAAGCGACCCTTTGGGACCAACTCTTATCAGGGAGGAGCGAACTGCTCAT Trereceraerretrecerrerecerrererereraeraeraerrererrecerrecearr GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC GTCCAGGTCCTTCATTATTTTGTCCAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCC AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC Gaps 1;

g

ð 용

8

```
AGENCOURT 8912008 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:646495757, mRNA sequence.
BQ948995.
GI:22364473
EST.
                                                                                                                                                                                                                                                                               420
TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 183
                                                                                                                                300
                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                  304 GTGAGGCCCGCAATTAGGGAAAAGGACTCTGGAAGCCCACTTTGCCATCTCTACACTGG 363
                                                                                                                                                                                                                                                                                                                   423
                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                          483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 641)

NIH-MCC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: NotI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
http://image.llnl.gov
Plate: LLAM13986 row: o column: 06
High quality sequence stop: 640.
                                                                                                                                                                                                                                                                                                                                                                             424 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCTCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                   364 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                               481 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGGTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="INAGE:646957"
/tissue_type="leiomyosarcoma"
/lab_host="DH10B (phage-resistant)"
/clone_llb="NIH_MGC_71"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604 CTGGACGCGGNGCGGAGAGCGCGCGCCGGCCTGTG 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGCGGAGAGGCGAGCGCGGCGGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .641
                     124
                                                                                                                                241
                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 35
BQ948995/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                   ò
                                                                                        셤
                                                                                                                            à
                                                                                                                                                             g
                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                       EST 22-JUN-1999
                                      618
   599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTTTGTCAAATGAGAGTTAGATTTATT 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi; Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 641)

Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R. Unpublished (1997)

Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Tel: 314 286 1800
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -40UP from Gibco
High quality sequence stop: 470.
Location/Qualifiers
                     TTTGGTGTGGTCCGTTGAAGCCTTGGTCGAGGCGCGGCGGACGCTGGGCGATCTGGGCGA
 TTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGGCGAGCTGGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGAACTAAAAAAGAACTTTATTTATTGAGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                      at30b06.xl Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2373491 3' similar to gb:M38591 CALPACTIN I LIGHT CHAIN (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 641;
                                                                       GCTGGACGCGGCGGAGAGCGCGCGCGGCGGCTGTGCGCCTTCC 646
                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 626.4; DB 1;
Pred. No. 2.8e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
/clone="IMAGE:2373491"
                                                                                                                                                                                                                                                                                                AI749536.1 GI:5127800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52.2%;
ilarity 98.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .641
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          630;
 540
                                    559
                                                                         009
                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                           A1749536
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

В ò g ò

ð

Thu

g

ઠે

a ઠે g ò 셤 ò 임 8 g ò 쉱 ઠ

ò

```
21 TAGAGGGAGGCGGTGCGGGAG 1
                                                                                                                                                                                                                                                                                   y Match
Local Similarity
thes 653; Conserva
                                                                                                                                                                                                                                                                                                                                                                 678
                                                                                                                                                                                                                                                                                                                                                                                          68
                                                                                                                                                                                                                                                                                                                                                                                                                    621
                                                                                                                                                                                                                                                                                                                                                                                                                                            128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   899
                                                                                                        source
                                                                                                                                                                                                                                                                                                               Matches
                                                                                         FEATURES
                                                                                                                                                                                                                                                                                     Query 1
Best Lo
                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                               8.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI093074 697 bp mRNA linear EST 20-JUN-2001
602858171F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:4999505 5',
                                                                                                                                                         120
                                                                                                                                                                                 506
                                                                                                                                                                                                          180
                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                             206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tregrerecerrenaecerreceesececesececeseceresecereseces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammala; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 697)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
  Primer: Oligo dT
                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTTCCAAAAATTCCA
                                                                                                                               625 GGAACTAAAAAGGAACTTTATTTATTGAGGGCAAGGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  145 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                   GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                             Gaps
                                                                             ö
                                                   Length 641;
                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cDNA Library Preparation: Life Technologies, Inc
Site 2: Sall; Cloned unidirectionally. Average insert size 2.1 kb. "
                                                    DB 5; Le
6.1e-142;
                                                   52.1%; Score 625; DB
100.0%; Pred. No. 6.1.
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGACGCGGGCGGAGAGCCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGGAGAGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA sequence. _ _ BI093074
BI093074.1 GI:14511404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                            625; Conservative
                                                                Similarity
                                                   Query Match
Best Local S
Matches 625
                                                                                                                                                                                 565
                                                                                                                                                                                                                                  505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85
                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                     445
                                                                                                                                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                          325
                                                                                                                                                                                                                                                                                                                                                                                                                                             265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI093074/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 36
                          ORIGIN
```

g

8 q ઠે 요

ઠે

```
622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     667
                                                                                                                                                                                                                                                                                            /cell_line="MGC36"
/lab host="DH108"
/clone lib="NHH MGC 10"
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
/site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.5 kb. Library prepared by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTAAAAAGACTTATTATGAGGGGCAAGGGGATGCAAAC---ATACAGAATCAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGGTATTAACTTGTCCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTICITICCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACACTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261 certriccardadracrercaddrecrerrigiraagradeerriareeceadeaarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGGAGCTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 GGTCCGTTGAAGCCTTGGCCGAGGGGGGCGGCGGACGTGGGCGAACGTGGACGTGGAGCTGGGCGAGCTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGGGCGGAGAGCGCGCGCGCGCTGTGCGCCTTCCTTAGTACGTGCGCGGCGGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGGGGCGGAGAGGCGGCGCGCGCGCCTTCCTTAGTACTACGTGCGCGGGGGGG
                                                þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTAACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
cDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI1029 row: n column: 18
High quality sequence stop: 671.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٠.
ک
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 625; DB 4; Length 69
Pred. No. 6.2e-142;
); Mismatches 25; Indels
                                                                                                                                                                                   1. .697
/organism="Homo sapiens"
                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4999505"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGAGGGGGGGGGGGAG 688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52.1%;
ilarity 95.9%;
Conservative
```

```
Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                        EST.
                                                                                                                                        541
                                                                                                                                                                                                                                            26
421
                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                 BM767559/c
                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                  RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                            a
                                                                                                                                                                       g
                       셤
                                                                 8
                                                                                                                                        ò
                                                                                                                                                                                                             8
                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue type="embryonic stem cell, retinoic acid and mitogen-treated hES cell line H7" /clone lib="GRN PRENBU" /note="oligo dT_primed, full-length enriched cDNA library from hES cell line H7 (p29) maintained in feeder-free conditions. Embryoid bodies were generated in the presence of all-trans retinoic and mitogens."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                  EST 16-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTCTCTAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACAITIGCIAAGIGICCIGAICIGGICAIGAAAICCIICIAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                      Brandenberger, R., Wei, H., Zhang, S., Lei, S., Murage, J., Fisk, G.J., Li, Y., Xu, C., Fang, R., Guegler, K., Rao, M.S., Mandalam, R., Lebkowski, J. and Stanton, L.W.

Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation

Nat. Biotechnol. 22 (6), 707-716 (2004)

Regenerative Medicine
                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                 CN271600 637 bp mRNA linear EST 16-MAY
17000600075087 GRN PRENEU Homo sapiens CDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51.9%; Score 622.8; DB 7; Length 637; larity 99.7%; Pred. No. 2.1e-141; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                  230 Constitution Drive, Menlo Park, CA 94025, USA Tel: 650 473 8658 Fax: 650 473 760 Email: rbrandenberger@geron.com
                                                                                                                                                                                                                                                                                                                                                                                                                                     Bmail: rbrandenberger@geron.com
Insert Length: 637 Std Error: 0.00.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                  CN271600.1 GI:47288014
                                                                                                                                      sapiens (human)
                                                                                                                                                                                                             (bases 1 to 637)
                                                                                                                                                                                                                                                                                                                                                                     Geron Corporation
                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                        Ношо
                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
Matches 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
            RESULT 37
CN271600/c
                                             LOCUS
                                                                                                                                                      ORGANISM
                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
/tissue type="Ascites"
/cell_type="Lymphoblast-like"
/cell_type="Lymphoblast-like"
/cell_tine="SNU-5"
/lab_host="Topl0F"
/clone_lib="SNU-5"
/clone_lib="SNU-5"
/clone_lib="SNU-5"
/clone_lib="SNU-5"
/clone_lib="SNU-5"
/clone_lib="SNU-5"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone_lib="Slone-state"
/clone-state="Slone-state"
/clone-state="Slone-state"
/clone-state="Slone-state"
/clone-state="Slone-state"
/clone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state"
/cone-state="Slone-state="Slone-state"
/cone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-state="Slone-s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BM767559 625 bp mRNA linear EST 04-MAR-2002
K-EST0050042 SISNU5s2 Homo sapiens CDNA clone SISNU5s2-3-G06 5',
                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 625)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
480
                                                                                                                                                                                                                                                                                                                                                                                                                 206 escadenecertricearcaciaerecerecerecirrerranguacerriareceea 147
                                                                                                                                                                                                                                                                                                          146 GCGAATTIGIGAAAIGIAAACAICAIGGITICCAIGGCGIGITCCAITIGAGAIGGCATI 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86 Trigergredriccerreaaccerreacceaacceceaaccereaccaaccreacceaac 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                   481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Kim YS

Genome Research Center

Korea Research Center

Korea Research Center

South Korea

Tel: +82-42-860-4470

Fax: +82-42-860-4409

Email: yongwamail:kribb.re.kr

Plate: 3 row: G column: 06

High quality sequence stop: 625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21C Frontier Korean EST Project 2001
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .625
/organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/clone="S1SNU582-3-G06"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGCGGAGAGCCGAGCG 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crecacececeaseaseaseases 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM767559.1 GI:19097174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /sex="F"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
```

ORGANISM

```
sequencing about 2,000 ~ 3,000 colonies in original cDNA library, the abundant cDNAs were selected and amplified by PCR reaction using vector region primer including T7 promotor as 5' primer and N(dT)14 as 3' primer. The PCR products were used as template for synthesis of bictinylated single stranded RNA by in vitro transcription reaction. The synthesized RNA probes were hybridized with antisense single stranded cDNAs prepared from original liberary and incubated with avidin-gel. After removing DNA-RNA hybrids by centrifuge, the subtracted cDNA libraries were constructed by transformation of the remaining DNA into competent cells E. coli Toplof' with electroporation method."
                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       648
                                                                                                                                                                                                                                                                                                                                                                                                          TACAAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAG 566
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGG 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTGCTCATTTGTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAAAAA386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAG 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAGATGGCATTTTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tragartritaritriacartriccraagrerectearcrecteargaaarcerteargg 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCA 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rccaaaaarccagggaacrccrrrrccargagracrcrcaggrccrccrrrgrraagrag 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCTGGGCGAGCTGTACGCGGGGCGGAGAGGCGAGCGCGGCGGCGGCGGCGTT
                                                                                                                                                                                                                                                                                                                                                                      TCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCTGGGCGAGCGCGGGCGGAGGCGAGCGCGGCGGCGGCTGTGCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAGCTGTGGGGCCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    centrareceeagegaartrergaaargraaacarearggrifecarggegrerecarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGACGCTGGGC
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                               Length 625;
                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                         Score 621.8; DB 4;
Pred. No. 3.7e-141;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                673
                                                                                                                                                                                                                                                                                             51.9%;
99.7%;
                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                   623;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     589
                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                         DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
```

BM842132 628 bp mRNA linear EST 06-MAR-2002 K-EST0119473 S12SNU216 Homo sapiens CDNA clone \$12SNU216-56-F10 5',

GI:19198541

mRNA sequence. BM842132 BM842132.1 GI:

ACCESSION VERSION KEYWORDS SOURCE

BM842132/c LOCUS

DEFINITION

EST. Homo sapiens (human)

```
/Globelloon in the Standards of the control of co
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 628)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and Kim,Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACAITIGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTGTGTAAATGAGAGTTAGATTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    563 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                    Korea Research Institute of Bioscience & Biotechnology 52 Boeun-dong Yuseong-gu, Daejeon 305-333, South Korea Tel: +82-42-860-4470 Fax: +82-42-860-44409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51.8%; Score 621.4; DB 4;
99.8%; Pred. No. 4.7e-141;
tive 0; Mismatches 1;
                                                                                                                                                                                                                 21C Frontier Korean EST Project 2001
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="Lymph node"
/call_type="Bpithalial"
/call_line="SNU-216"
/lab_host="Toplof"
/clone_lib="S12SNU216"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="S12SNU216-56-F10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: yongsung@mail.kribb.re.kr
Plate: 56 row: F column: 10
High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                               Genome Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /sex="F"
                                                                                                                                                                                                                                                                                        Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 622; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                 TITLE
JOURNAL
COMMENT
                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

ô

9

180 445 240

120 505 360

265

325

420

205

480

540

85

d

음 à g

ò

g

ò

В à 셤

ò

```
AGENCOURT_8777162 NIH_MGC_40 Homo sapiens cDNA clone IMAGE:6384795 5', mRNA sequence. BQ943717 GI:22359195 EST.
kb size fraction (other fractions present in NIH_MGC_127 and NIH MGC 128). Library created in the laboratory of T. Usdin, M.D., Ph.D. (NIMH, NIH). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                        624 GGAACTAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541 TTGGTGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 638)
NHH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                      564 AAGCITATCHGTATTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTAGATTTAATT
                                                                                                                                                                                                                                                                                                                                                                                  504 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 384 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       324 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTGCTTGTCAAATGAGAGTTAGATTATT
                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                        181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264 rccaggrccrrcarrarrrrrgrccacaggccagaggrcrrrrrgarrrrccaaaaarcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                            Gaps
                                                                                                                                                              ;
0
                                                                                                                       Length 794;
                                                                                                                   Query Match 51.8%; Score 621; DB 5; Length 79
Best Local Similarity 100.0%; Pred. No. 6e-141;
Matches 621; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGCGGAGGGC 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGCGGAGAGGC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 41
BQ943717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                ORIGIN
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGENCOURT 10435041 NIH MGC 126 Homo sapiens cDNA clone INAGE:6552090 5', mRNA sequence.
                                                             420
                                                                                                                                                                                                                        540
                                                                                                                                            480
                                                                                                                                                              TIGGIGIGGICCGTIGAAGCCTIIGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (bases 1 to 794)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.-AAGCAGTGGTATCAACGCAGAGTGGCCATTACGGCCGGG-3' and
5.-ATTCTACAGGCCGAGGCGCGACATG-dT(30)Nn-3'. Full-length
enriched library was constructed using the Clontech
creator SMART kit and size-selected to contain the 0.5-1
                    GTGAGGCCCGCAATTAGGGAAAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                rccaggrccrrcarrarrrrgrccacagagggrcrrrrrgarrrccaaaaarcca
                                                                                                                                                                                                                                          GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                           TTGGTGTGTTGTTCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCTGGGCGAGCTGGGCGAG
                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        þe
CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution: MGC clone distribution information can letter through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov column: 10 Plate: LLCM2899 row: p column: 10 Plate: LLCM2899 row: p column: 10 High quality sequence stop: 589.

Location/Qualifiers
1. 794
/organism="Homo_sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGGCGA 623
                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGGAGAGCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BU860855.1 GI:24045847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BU860855
                                                                                                  263
                                                                                                                                       421
                                                                                                                                                                               203
                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                       83
                                                                                                                                                                                                                                                                                                                                                                                                                 23
                    323
                                                           361
                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BU860855/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
```

```
Average insert size 2.1 kb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens"
                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo
                                                                                                                                                                             BM461859.1 GI:18510899
                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .898
                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                              BM461859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 620;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local
                                                                        RESULT 42
BM461859/c
                                                                                                                                                                                                                                  ORGANISM
                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                            ACCESSION
                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                /clone_libe_NINID MCG_40"
//clone_lorgan: prostate; Vector: pOTB7; Site_1: Xho1;
/note="Organ: prostate; Vector: pOTB7; Site_1: Xho1;
Site_2: EcoR1; CDNA made by oligo-dr priming.
Directionally cloned into EcoR1/Xho1 sites using the following S' adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGAACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500 ritacaririscraagisiccrearcrecreardaaarccricraresessaagcrerese 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 O GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGACTGCTCATT 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260 TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTGTCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAGCGTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                          þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
Tissue Procurement: DCTD/DTP

CDNA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.lln.gov

Plate: LLCM2580 row: g column: 04

High quality sequence stop: 637.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.7%; Score 620; DB 5; Length 638; 100.0%; Pred. No. 1e-140; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                            Clone="IMAGE:6384795"
/tissue_type="carcinoma, cell line"
/lab_host="DH108 (phage-resistant)"
                                                                                                                                                                             1. .638
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601 CTGGACGCGGGCGGAGAGG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 620; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                  source
                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
898 bp mRNA linear EST 05-FEB-2002
AGENCOURT 6418411 NIH_MGC_71 Homo saplens cDNA clone IMAGE:5533915
5′, mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 AAGCTTATCTGGTATTTAACTTTTCTCTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol type="manny" septems
/mol type="manny" septems
/db xref="texon:9606"
/db xref="texon:9606"
/clone="manny ype="released septems" |
/lab_host="DH10B (phage-resistant)"
/clone lib="NH1 MGC 71"
/note="Organ: userus; Vector: pCMV-SPORT6; Site 1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo. I (bases 1 to 898) NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rereceracerecerecereceresers and a series of the series of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGATTAGATTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgabb-remail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information of the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI2219 row: i column: 20
High quality sequence stop: 625.
High quality sequence stop: 625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Length 898;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.7%; Score 620; DB 4; Le
100.0%; Pred. No. 1.1e-140;
iive 0; Mismatches 0;
```

```
EST 18-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 662)
                                                                                                                                                                                      465 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                      345 GTTGAAGCCTTGGCCGAGGCGGACGCTGGCCGAGCTGGCCGAGCTGGACGCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          585 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                          TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                         AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGAGCTGGACGCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGGCGGCGCGCGGAGCGGGAAGCCTGGCGGCGCTCGGCAGGCGCTCCCCCAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   225 GGAGGCGGTGCGGGAGCGGGAGGCCTGGCGGGGCGCTCGGCAGGCGCTCCCCCCAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     165 rererececererrecrececedeserececesaciones reseces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373 ATTAITTIGICCACAGCCAGAGGGICITITIGAITTICCAAAAAICCAGGGAACICCTIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (Jaces 1.0 021)
MRH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MC clone distribution: MC clone distribution information can lettp://image.lln.gov
Plate: LLCM2991 row: column: 20
High quality sequence stop: 537.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            662 bp mRNA linear ES1
AGENCOURT 10520015 NIH_MGC_128 Homo sapiens cDNA clone
IMAGE:6701084 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45 TAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BU934696.1 GI:24123515
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU934696
                                                    313
                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BU934696/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                  ò
                                                                                                                                                                                              g
                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mark" September |
/mol_type="mark" |
/mol_type="markna" |
/db xref="taxon:9606" |
/clone="IMAGE:4514488" |
/tlasue_type="chorisoarcinoma" |
/tlasue_type="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       602404165F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:4541488 5', mRNA sequence.
                                                                                                    480
                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Uppublication (1272)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llni.gov
Plate: LLCM1220 row: b column: 17
High quality sequence stop: 635.
Location/Qualifiers
                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

    (bases 1 to 645)

                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                         TTGGTGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGACGCTGGGCGAGCTGGGCGAG
  TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                          GCGAATTGTGTGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l (bases 1 to 645)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4; Length 645;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 619.8; DB 4;
Pred. No. 1.2e-140;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGGGGAGG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG335338.1 GI:13141776
                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGCGGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51.7%;
larity 98.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG335338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Si
Matches 636,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
  361
                                                  260
                                                                                                    421
                                                                                                                                                   200
                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 43
BG335338/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                            임
                                    g
                                                                                                    ò
                                                                                                                                 ద
                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

þe

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 619)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R., Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and Kim,Y.S.
                                      CB158822 619 bp mRNA linear EST 30-JAN-2003
K-EST0218240 L18POOL1n1 Homo sapiens CDNA clone L18POOL1n1-27-A04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACA 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGTGTACTACAAAATAGTCATTGCATGCTGAGGCCCGCAATTAGGGAAAAGAAG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAG 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crcargaaarccrrcrargggaagcrgrggggcagarrccrraagggacccrrrggga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCAAGGGATGCAAACAATACAAAAATCAAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC
                                                                                                                                                                                                                                                                                                                           Unpublished (2022)
Contact: Kim YS
Contact: Kim YS
Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
F1 + 82 - 42 - 860 - 4400
Fax: +82 - 42 - 860 - 4409
Fax: +82 - 42 - 860 - 4409
Fax: +92 - 7 row: A column: 04
High quality sequence stop: 619.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51.6%; Score 619; DB 6; Length 619; 100.0%; Pred. No. 1.8e-140; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /cell line="SNU-354+Cho-CK+Choi-CK+HLK-3"
/lab_host="Topl0F'"
                                                                                                                                                                                                                                                                                                               21C Frontier Korean EST Project 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="L18POOL111-27-A04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                 CB158822.1 GI:28144948
                                                                                                                                                       Homo sapiens (human)
                                                                  5', mRNA sequence.
CB158822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          culture."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .619
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 619; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
RESULT 45
CB158822/c
LOCUS
DEFINITION
                                                                                                                                                                           ORGANISM
                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
            /clone="MAGES:6701084"
/tissue_type="mixed (pool of 40 RNAs)"
/lab_host="DH10B (T1-phage-resistant)"
/clone_lib="NHH MGC 128"
/clone_lib="NHH MGC 128"
/clone=lib="NHH MGC 128"
/note="Vector: pDNR-LIB; Site_l: Sfil (ggccattatggc);
Site_l: Sfil (ggccgctcggc); Double-stranded cDNA was
prepared from a pool of 40 cell line polyA+ RNAs (bladder-2%, blood -33.4%, brain -5.6%, breast -12.5%, colon-4%, connective tissue -1.4%, eye -1%, intestine -2.6%,
kidnney -2.2%, liver -5.7%, lung -10.8%, NK-cell -5.2%, ovary -4%, pharynx -2.5%, prostate -4.3%,
salivary gland -1.3%, and skin -2.3%; s' and 3'
adaptors were used in cloning as follows:
S'-ARGCAGTGGTATCAACGCAAGTGGCCATTACGGCGGG-3' and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                      5'-ATTCTAGAGGCGGGGGGGCAATG-dT(30)NN-3'. Full-length enriched library was constructed using the Clontech Creator SMART kit and size-selected to contain the >2 kb size fraction (other fractions present in NIH_MGC 12 and NIH MGC 127). Library created in the laboratory of T. Usdīn, M.D., Ph.D. (NIMH, NIH). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504 TITACATITIGCIAAGIGICCIGATCIGCICATGAAATCCITCTATGGGGGAAGCIGIGGG 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTGTGCCCTTGAAGCCTTGGCCGAGGCGCGCGGCGACCCTGGGCCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rregrereregrecerregeceragecerageceses 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  564 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 619.4; DB 5;
Pred. No. 1.4e-140;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGACGCGGGCGGAGAGGC 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGCGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       al Similarity 99.8
620; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              Library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

200

260

87

Gaps

;

207 440

ò	388 GCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCT 447
qa	259 GCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTC 200
č	448 AGGTCCTCCTTTAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATG 507
qa	199 AGGICCTCCTTGTTAAGTAGCCTTTAICCCCAGCGAATTTGTGAAATGTAAACATCATG 140
λŏ	508 GTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTGCGTTGAAGCCTTGGCC 567
අුග	139 GTTTCCATGGCGTGTTCCATTTGGGATGGCATTTTGGTGGGCCGTTGAGCCTTGGCC 80
ò	568 GAGGCGCGGCGGACGCTGGCCGAGCTGGACGGGGGGGGGG
qq	79 GAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
λŏ	628 GGCGGCTGTGCGCCTTCC 646
qa	19 GGGGGCTTCC 1
Search c	Search completed: August 18, 2005, 06:28:58
מסף רדוווב	UOD LIME : 3/79 BECB